

# Adding to My Skills...

**Numeracy Curriculum  
for Essential Skills  
Levels 1 and 2.**

**Sandy Coghlin  
Project READ Literacy Network**



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Gratefully,  
Sandy Coghlin,  
Researcher/Writer

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## **INTRODUCTION**

**Adding to My Skills** is a project funded by the Workplace and Community Workforce Literacy & Essential Skills Projects, Ministry of Training Colleges and Universities. Its main focus is to use real life numeracy activities as a starting point in order to develop skills required in the workplace.

One strategy for teachers is to:

“teach from concrete (using real things that can be touched and manipulated) to semi-concrete (using photos and drawings) to abstract (using mathematical symbols).”

Numeracy – Ontario Literacy Coalition,  
Best Practice & Innovations, pages 12-13.

### **What is Numeracy?**

According to Human Resources and Skills Development Canada, numeracy is the ability to use and understand numbers.

In adult numeracy,

“mathematics is taken from the real world (or everyday life activities) into the classroom and back.”

A Report to the Adult Basic Education Unit,  
Toronto Board of Education by Tom Ciancone, 1988.

This project is written by reinforcing this premise and identifying the numeracy skills found in everyday life activities. The numeracy skills the students currently have is the starting point. Additional numeracy activities are introduced in each class to increase workplace knowledge in pursuit of employment.

## Important Information for the Practitioner

This curriculum is divided into 18 classes. Each class will introduce an everyday life activity for a reference point, and continue reinforcing the embedded numeracy skills present using workplace activities. The workplace activities are at Essential Skill level one and two. The class will also include additional computer activities enhancing the workplace skills just learned.

A preparation page for each activity has been included for any additional information. On this page you will find the listing of materials required and time allotted to complete this activity.

If the heading of the page does not state it is for the practitioner, then it is for the student's use.

This curriculum has been written using the philosophy of learning the basic numeracy skills prior to the introduction of the calculator. Allow the students to develop their numeracy skills without the use of a calculator for the first 6 classes. In class 7 some basic calculator exercises have been included to introduce this skill.

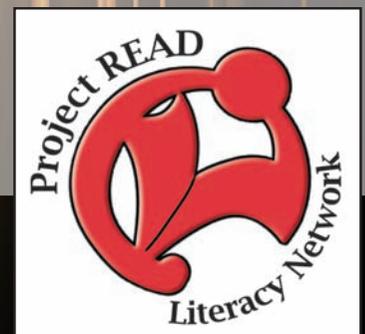
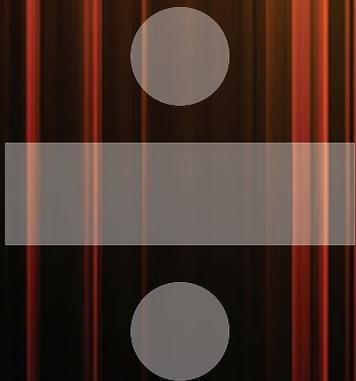
Computer activities have been incorporated into each class to provide additional practice. PLATO activities, found on the Learning Hub, to further enhance the numeracy skill development will be used. A registration form for the Learning Hub must be completed to access the selected numeracy activities. Instructions for completing a registration form for the Learning Hub has been included in all classes.

Detailed instructions to access the computer activities have been included in each class. Familiarize yourself with websites prior to introducing the activities to the students because websites are always being updated and changed.

This project is field tested in the Waterloo-Wellington area of Ontario; therefore occupations in the public sector with steady previous growth and a high retirement rate have been highlighted in the workplace activities. If you are interested in finding out the job prospects in your region, please take a look at the website [www.workforceplanningboard.com](http://www.workforceplanningboard.com).

# CLASS ONE

## Counting Skill



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	Introduction
Purpose:	Read to the students about job trends in their community for potential job opportunities.
Materials Required:	Prerequisite (Outside of Project): look at <a href="http://www.workforceplanningboard.com">www.workforceplanningboard.com</a> to find out about job prospects in your region.
Time Allotted:	15 minutes
Any Additional Information:	A calculator is not required for this class.

# CLASS ONE

## PRACTITIONER PAGE

(THIS PAGE MAY BE HELPFUL TO  
THE STUDENTS AS WELL)

Welcome to **Adding to My Skills!!!** This is a comprehensive six week program consisting of eighteen classes of three hour duration. The goal is to give the learner the confidence and numeracy essential skills to go onto either employment or further education and training.

“Learning is what most adults will do for a living in the 21<sup>st</sup> century.”

Bob Perelman,  
Contemporary American poet,  
critic and professor

### Introduction

To serve the needs of the learners, the Labour Market Board was consulted to find out what occupations in the local public sector are indeed showing steady previous growth and a high retirement rate in the region where the field testing will take place. Activities for the majority of occupations found in the National Occupation Codes C & D are included.

According to Employment Ontario for occupations in the local public sector, Waterloo-Wellington-Dufferin area, there is steady previous growth in early childhood educator assistants, nurse aides, orderlies and patient service associates, community and social service workers, receptionists and switchboard operators, and office clerks. There is a forecast for high retirement rate for:

- Nurse aides, orderlies and patient service associates
- Receptionists and switchboard operators
- General office clerks

Statistics Canada, Census Data, 2006

Workforce Focus from the Workforce Planning Board of

Waterloo Wellington Dufferin. Volume 5, Issue 6, March 2010

## **Promising Local Occupations**

### **Good Employment Prospects in Waterloo Region, Wellington & Dufferin**

- 1) Customer service and information clerks – strong growth as a number of new call centres have come to the area – Major Group 14 NOC codes
- 2) Nurse aides, orderlies, and patient service associates – future demand will be largely in long term care facilities – Major Group 34 NOC codes
- 3) Community and social service workers – opportunities are best for those with appropriate post-secondary education – Major Group 42 NOC codes
- 4) Chefs and cooks – despite the sector’s sensitivity to economic cycles, the best trained chefs and cooks are in demand – Major Group 66 NOC codes
- 5) Food and beverage servers – population growth and tourism are contributing to demand for these workers – Major Group 64 NOC codes
- 6) Automotive service technicians, truck mechanics, and mechanical repairers – still a need for qualified people – Major Group 72/73/74 NOC codes
- 7) Truck drivers – demand is especially strong for drivers with “D”, “A”, or “AZ” licenses – Major Group 74 NOC codes
- 8) Nursery and greenhouse workers – a growing demand for specialty horticultural products, such as organic foods – Major Group 84 NOC codes

Source: Human Resources and Skill  
Development Canada, 2008

This project is field tested in the Waterloo-Wellington area of Ontario therefore occupations in the public sector with steady previous growth and a high retirement rate have been highlighted in the workplace activities. If you are interested in finding out about the job prospects in your region, please take a look at the website [www.workforceplanningboard.com](http://www.workforceplanningboard.com). Now that we have an idea of what types of occupations are potentially looking for employees, let’s switch back to what everybody feels comfortable with –everyday life activities.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	Activity 1
Purpose:	To allow the students to think about numeracy activities in their everyday life.
Materials Required:	A whiteboard or chalkboard to record the ideas.
Time Allotted:	15 minutes
Any Additional Information:	Ask your students to come up with ideas where numeracy activities are completed in everyday life.

## PRACTITIONER PAGE

### Activity 1

Our first activity is to come up with numeracy activities that are done at home. Ask your students to come up with some ideas where numeracy activities are completed in everyday life.

Some possible answers are:

- Follow a recipe and adjusting serving sizes (doubling the recipe)
- Decorate your home by purchasing paint and wallpaper – square footage
- Creating a grocery list by comparison shopping
- Calculating the best price on appliances
- Make everyday purchases and calculating change
- Calculating sales tax
- Comparing measurements (imperial to metric)
- Checking pay rate schedules for accuracy
- Calculating the tip at a restaurant
- Paying bills
- Following a budget

This is just an example of some of the activities that involve numeracy from our everyday life.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Counting Skill
Materials Required:	Copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	15-20 minutes
Any Additional Information:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in determining a person's age by adding. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 &amp; 2.</li><li>3. Question 3 is a bit more challenging. See if the students understand that it is an adding question also.</li><li>4. Continue this activity by reading about the calculations involved in determining a person's age by subtracting. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>5. Have the students complete Exercise questions 4 &amp; 5.</li><li>6. Question 6 is more challenging. Instruction on how to calculate part years before attempting this question is encouraged.</li></ol>

## EVERYDAY LIFE ACTIVITY (1)

How do we calculate a person's age? For example, a person was born on January 1, 2000. How old would that person be on January 1, 2010?

In this activity we are adding up the number of years that have passed from the birth date of the person to the end date.

January 1, 2000 – January 1, 2001 -	1 year
January 1, 2001 – January 1, 2002 -	1 year
January 1, 2002 – January 1, 2003 -	1 year
January 1, 2003 – January 1, 2004 -	1 year
January 1, 2004 – January 1, 2005 -	1 year
January 1, 2005 – January 1, 2006 -	1 year
January 1, 2006 – January 1, 2007 -	1 year
January 1, 2007 – January 1, 2008 -	1 year
January 1, 2008 – January 1, 2009 -	1 year
January 1, 2009 – January 1, 2010 -	1 year

TOTAL                      10 years

### Exercises

1. Sam was born on April 1, 1991. Today's date is April 1, 2010. How old is Sam?  
\_\_\_\_\_
2. Susan was born on April 15, 1996. Today's date is April 15, 2010. How old is Susan?  
\_\_\_\_\_
3. The last time you saw Kevin, he was 17 years old. That was 8 years ago. How old is Kevin now?  
\_\_\_\_\_

In this example a person was born on January 1, 2000. How old would that person be if today was June 15, 2010?

In this activity we are beginning with the end date, or June 15, 2010 and subtracting the starting date, or January 1, 2000. However, when you have a part month (such as June 15), begin with the beginning of the year (or January 1, 2010) in order to calculate the years.

$$\begin{array}{r} \text{January 1, 2,010} \\ \text{Subtract } \underline{\text{January 1, 2,000}} \\ 10 \text{ years} \end{array}$$

To calculate the number of months from January 1, 2010 to June 1, 2010, you would subtract the number of months that have passed from June 1, 2010 to January 1, 2010.

$$\begin{array}{r} \text{June 1, 2010} \\ \text{Subtract } \underline{\text{January 1, 2010}} \\ 5 \text{ months} \end{array}$$

May 1, 2010 – June 1, 2010	1 month
April 1, 2010 – May 1, 2010	1 month
March 1, 2010 – April 1, 2010	1 month
February 1, 2010 – March 1, 2010	1 month
<u>January 1, 2010 – February 1, 2010</u>	<u>1 month</u>
Total	5 months

June 1, 2010 – June 15, 2010                      15 days

## **Exercises**

4. Charlie was born on January 1, 1991. Today's date is April 15, 2010. How old is Charlie?

---

5. Emily was born on February 15, 2000. Today's date is July 1, 2006. How old is Emily?

---

6. Joseph was born on August 1, 2000. Today's date is June 15, 2010. How old is Joseph?

---

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Counting Skill
Materials Required:	Copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Any Additional Information:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in determining preparation time by adding. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Continue this activity by reading about the calculations involved in determining preparation time by subtracting. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>3. Have the students complete Exercise questions 1 &amp; 2.</li><li>4. Read a list of the occupations using this same skill on page 1-12.</li></ol>

## EVERYDAY LIFE ACTIVITY (2)

In this activity you are baking a cake. When you read the recipe, how will you know the amount of time to bake it? That's right—it tells you in the recipe. In order to know the passage of time, you require the skill to manage time.

On a clock, there are two hands. The small hand stands for the hours and the big hand stands for the minutes. There are 60 marks on a clock and each mark stands for 1 minute. In one full hour, the big hand (or the minute hand) circles past all 60 marks. There are 12 hours marked by numbers. In one day, the small hand (or the hour hand) makes 2 complete circles past all 12 numbers.

Let's try an example:

Laura is baking a cake and the recipe tells her to bake it for 1 hour. She puts the cake in the oven at 3:00 p.m. What time will the cake be done?

$$3:00 \text{ p.m.} + 1 \text{ hour} = 4 \text{ or } 4:00 \text{ p.m. OR}$$

$$3:00 \text{ p.m.} + 60 \text{ minutes} = 4:00 \text{ p.m.}$$

Laura is now trying to figure out when to put the cake in the oven. She has guests arriving at 5:00 p.m. and the cake takes 1 hour to bake. What time does she need to put the cake in the oven?

$$5:00 \text{ p.m.} - 1 \text{ hour} = 4 \text{ or } 4:00 \text{ p.m. OR}$$

$$5:00 \text{ p.m.} - 60 \text{ minutes} = 4:00 \text{ p.m.}$$

### Exercises

1. The pot roast you are preparing takes 2 hours to bake. You put it in the oven at 3:30 p.m. What time will the roast be done? How many minutes are in 2 hours?  
\_\_\_\_\_
2. You are preparing a brunch for several guests. They are arriving at 1:00 p.m. The egg casserole will take approximately 2 hours and 15 minutes to bake. What time should you put the egg casserole in the oven?  
\_\_\_\_\_

In order to successfully answer the questions for the everyday life activities, you needed the ability to count the number of months that have passed from the date of birth to the ending date, or today's date and the amount of time that has passed.

You also needed the ability to calculate the amount of time required to prepare something in the oven and also to have it ready for a specific time.

Many occupations require this same counting skill known as Measurement and Calculation Math:

- Administrative clerks (NOC 1441) – count inventory or supplies on hand
- Library Clerks (NOC 1451) – count the number of books to be shelved and the number of loan requests
- Shippers and Receivers (NOC 1471) – take note of the time that a truck sits waiting to be loaded or unloaded, as this determines the charge for waiting time
- Retail Sales Associates (NOC 6421) – calculate quantities, such as the quantity of material required to cover a window of certain dimensions
- Cashiers (NOC 6611) – count stock, such as lottery tickets, and subtract this figure from the previous count to calculate sales

## PREPARATION PAGE FOR THE PRACTITIONER

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
1	1 Measurement & Calculation - measuring out quantities	2 - Adds & Subtracts multi-digit numbers	Library Clerk (NOC 1451)

Materials Required:	Copy of Workplace Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Any Additional Information:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 1 by reading the introduction.</li> <li>2. Have the students complete the table for books to be shelved.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (1)

Document: 1  
Essential Skill  
Level: 1  
Skill: Measurement  
Calculation  
- measuring out  
quantities  
LBS Level: 1  
- adds and  
subtracts  
multi-digit  
numbers

Today, you are a library clerk. In the next exercise, the number of books needing to be shelved are counted. \*\*Hint: when counting objects, it is sometimes easier to keep track using tick or tally marks.

1. Complete the following table by adding up the book types and inserting the number in the correct column. There are six fiction and three non-fiction categories.
  - a) First establish what category the book title fits into. The letter following the name of the book tells you this:

Romance – R	Biography – B
Western – W	Business – Bus.
Mystery – M	Cookbook – C
Science Fiction – S	Geography – G
Fantasy – F	Health – H
Thriller – T	Music – MU
  - b) The number after the books shows the number of books to be shelved. There might be more than one with that same title.
  - c) Place a tally mark (*I*) in the column where this book needs to be shelved.
  - d) Add up the number of tally marks to obtain the totals for fiction and non-fiction.

Book Titles

**Fiction**

- 1) Harlequin Romance (R)-4
- 2) The Haunting of Hill House (T)-1
- 3) Sherlock Holmes Mysteries (M)-3
- 4) The Martian Chronicles (S)-1
- 5) It Had to Be You (R)-1
- 6) Jurassic Park (F)-1
- 7) Tales of Mystery and Imagination (M)-1

**Non-Fiction**

- 1) The Amazing Little Cookbook (C)-1
- 2) My First Piano Book (MU)-1
- 3) Anne Frank: The Diary of a Young Girl (B)-1
- 4) Simply Spectacular Cakes (C)-1
- 5) Learn to Play the Guitar (MU)-1
- 6) How to Eat, Move and Be Healthy (H)-1

BOOKS TO BE SHELVED

<b>Fiction</b>	<b>Tally Marks</b>	<b>Non-Fiction</b>	<b>Tally Marks</b>
Romances		Biographies	
Westerns		Business Books	
Mysteries		Cookbooks	
Science Fiction		Geography Books	
Fantasy		Health and Wellness Books	
Thriller/Horror		Music Books	
<b>TOTALS</b>		<b>TOTALS</b>	

## PREPARATION PAGE FOR THE PRACTITIONER

<b>Workplace Activity</b>			
<b>ACTIVITY NUMBER</b>	<b>ESSENTIAL SKILL LEVEL &amp; SKILL</b>	<b>LBS LEVEL &amp; SKILL</b>	<b>N.O.C.</b>
1	1 Measurement & Calculation - calculating differences	2 - Subtracts multi-digit numbers	Cashier (NOC 6611)

Materials Required:	Copy of Workplace Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Any Additional Information:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 2 by reading the introduction.</li> <li>2. Have the students complete the table by subtracting the amount sold from the weekly total to obtain the total sales.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (2)

Document: 2  
Essential Skill  
Level: 1  
Skill:  
Measurement  
Calculation  
- calculating  
differences  
LBS Level: 2  
- subtracts  
multi-digit  
numbers

Today you are a grocery store clerk working at the customer service desk. The lottery tickets inventory count sheet requires some updating.

In this activity, you have been given the amount of the lottery tickets on-hand for the week. This is the amount found in the weekly total column.

<b>Lottery Ticket Name</b>	<b>Weekly Total</b>	<b>Amount Sold</b>	<b>End of the Week Totals</b>
Awesome Millions	35		
Lotto 2417	20		
Super Mega Millions	15		
Witty Fun Lotto	18		
Fast Money Millions	25		
Best Money	10		
Bouncy Lotto	45		
Fabulous Money	30		
Alberta Lotto	25		
Vancouver Money	30		
Juicy Fun Lotto	60		
Choose 5	75		
Not Money	15		
Free Lotto	20		
Epic 9	45		
Radical Five	20		

Listed below, are the activities that have taken place during the week for the sales of lottery tickets.

Step 1: Insert the amounts in the (amount sold) column above.

Step 2: Subtract the amount sold from the weekly total to calculate the end of the week totals.

- 1) Sally purchased five Lotto 2417, two Vancouver Money and two Free Lotto tickets.
- 2) John purchased ten Choose 5 tickets.
- 3) Joe purchased six Fabulous Money tickets.
- 4) Susan purchased three Bouncy Lotto, two Super Mega Millions, four Best Money and two Epic 9 tickets.
- 5) Emily purchased ten Witty Fun Lotto, eight Not Money and four Radical Five tickets.
- 6) George purchased two Awesome Millions and four Juicy Fun Lotto tickets.
- 7) Jane purchased three Fast Money Millions and four Alberta Lotto tickets.
- 8) Peter purchased seven Awesome Millions.
- 9) Orlando purchased five Alberta Lotto.
- 10) Jacob purchased two Not Money.

## COMPUTER ACTIVITY

Time Allotted:  
30 - 45 minutes

The first computer activity we are going to look at today is [www.funbrain.com](http://www.funbrain.com).

- From the Google homepage type **funbrain**.
- Click on **Funbrain.com** – The Internet’s #1 Education Site.
- Click on **All Games** (located at the upper right hand corner of the screen).
- Under the **Numbers** section, click on **Math Baseball**.
- You now have to choose whether you would like to add, subtract, multiply or divide, or all of the above. Make your selection.
- Choose a level from easy, medium, hard or superbrain. Begin with easy to see how it goes.
- You begin the exercise by entering your answer under “the pitch is” box and then click on swing. The game will automatically register your answer. If you would like more of a challenge, select the Harder button.
- Have fun and PLAY BALL!!

The second computer activity is found under [www.mathplayground.com](http://www.mathplayground.com).

- Type in **math playground** from the Google menu.
- Select **Math Playground**.
- Look at the coloured menu on the left and click on **Math Games**.
- Scroll down to the bottom of the page and click on **Quick Math**.
- Click on **Start**.
- Follow the instructions to insert the (+, -, ×, ÷) into the equation.
- Click on Start.

For students requiring some extra practise using the computer, **A website has been included within the homework pages of this class.** This might help them feel more comfortable with the computer activities introduced in this curriculum.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## HOMEWORK FOR CLASS ONE

To practice the counting skill, calculate what the ages of ten family members and friends will be in 8 years time.

Take a look at some of your favourite recipes. Calculate the amount of time required for baking. When do you need to start baking the item in order to have it ready for guests arriving at 5:00 p.m.?

**Reminder:** Bring a telephone bill for tomorrow's class.

For additional practice using the computer:

- From the Google homepage, type **using the computer**.
- Double click on Beginners Guide which takes you to [www.bbc.co.uk](http://www.bbc.co.uk)
- This website begins with lessons on
  - Using the mouse
  - Holding the mouse
  - Moving the mouse
  - Moving the pointer, and so on.....

It also has practice exercises to accompany the lessons.



# ANSWER KEY FOR THE PRACTITIONER

## Everyday Life Activity 1

### Exercises

1. 19 years old
2. 14 years old
3.  $17 + 8 = 25$  years
4. 19 years, 3 months, 15 days
5. 6 years, 4 months, 15 days
6. 9 years, 10 months, 15 days

## Everyday Life Activity 2

### Exercises

1. 5:30 p.m. and 120 minutes
2. 10:45 a.m.

## Workplace Activity 1

### Books To Be Shelved

Romances	5	Biographies	1
Westerns	0	Business Books	0
Mysteries	4	Cookbooks	2
Science Fiction	1	Geography Books	0
Fantasy	1	Health & Wellness	1
Thriller	1	Music Books	2
<b>Total</b>	<b>12</b>	<b>Total</b>	<b>6</b>

## ANSWER KEY FOR THE PRACTITIONER

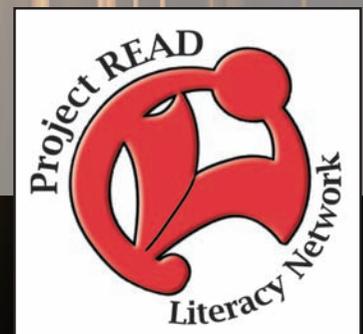
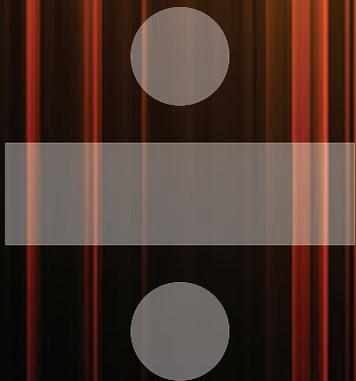
### Workplace Activity 2

Lottery Tickets	Weekly Total	Amount Sold	Total Sales
Awesome Millions	35	9	26
Lotto 2417	20	5	15
Super Mega Millions	15	2	13
Witty Fun Lotto	18	10	8
Fast Money Millions	25	3	22
Best Money	10	4	6
Bouncy Lotto	45	3	42
Fabulous Money	30	6	24
Alberta Lotto	25	9	16
Vancouver Money	30	2	28
Juicy Fun Lotto	60	4	56
Choose 5	75	10	65
Not Money	15	10	5
Free Lotto	20	2	18
Epic 9	45	2	43
Radical Five	20	4	16



# CLASS TWO

## Adding Prices



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Counting Skill
Materials Required:	Copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Any Additional Information:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in adding prices.</li><li>2. Continue this activity by showing how to calculate PST and GST. You might want to show this calculation on the whiteboard or chalkboard.</li><li>3. Read about the changes to our tax calculations by informing them about the HST. Additional information may be obtained on <a href="http://www.ontario.ca/taxchange">www.ontario.ca/taxchange</a>.</li></ol>
Additional Information	A calculator is not required for this class.

## CLASS NUMBER TWO

### Introduction

In this class, we are going to concentrate on adding prices.

When paying a monthly telephone bill the charges are listed in a column. Adding decimals (or money) is the same as adding whole numbers. The only difference you need to remember is to line up the decimal points, so that you are adding digits with the same place value.

For example,

$$\begin{array}{r} 20.00 \\ + 15.00 \\ \hline = 35.00 \end{array}$$

Before we begin to calculate the sales tax, some understanding of multiplying money must be completed.

When you multiply money by a whole number, first line up the digits starting at the right. For example,  $\$6.00 \times 3 = \$18.00$ .

$$\begin{array}{r} \$6.00 \\ \times \quad 3 \\ \hline \$18.00 \end{array}$$

Place the decimal point in your answer two places to the left of where your decimal point would normally be. For example  $600 \times 3 = 1800$  and  $\$6.00 \times 3 = \$18.00$ .

To calculate the GST tax, you would multiply  $\$27.00 \times 5\%$ . When you are changing percents to decimals, you write the number without the percent sign and move the decimal point two places to the left. For example, 4% would be .04 because 4% is actually 4.0. For percents under 10%, put a zero in front of the number so that you can move the decimal point two places to the left.

$$50\% = 50 = .5$$

$$36\% = 36 = .36$$

$$4\% = 04 = .04$$

Let's calculate  $\$27.00 \times 5\%$  for the GST tax:

$$\begin{array}{r} \$27.00 \\ \times .05 \\ \hline \end{array}$$

Let's calculate  $\$27.00 \times 8\%$  for the PST tax:

$$\begin{array}{r} \$27.00 \\ \times .08 \\ \hline \end{array}$$

### **Harmonized Sales Tax Facts**

On July 1, 2010, the HST or Harmonized Sales Tax came into effect in the province of Ontario. The HST is a new combined tax replacing the PST or 8% tax and the GST or 5% tax for a total of 13% tax.

Here is an outline of some of the changes:

- Dry Cleaning Services have increased from 5% GST to 13% HST
- Alcoholic beverages have gone from 5% GST plus 10-12% PST to 13% HST  
– (could be a reduction in taxes)
- Electricity and Heating have increased from 5% GST to 13% HST
- Internet Access Services have increased from 5% GST to 13% HST
- Home Service Calls (from plumber, electrician, etc.) have increased from 5% GST to 13% HST
- Lawn Care Services have increased from 5% GST to 13% HST
- Hotel rooms have increased from 5% GST and 5% PST to 13% HST
- Taxis have increased from 5% GST to 13% HST
- Campsites have increased from 5% GST to 13% HST
- Domestic air, rail, boat and bus travel have increased from 5% GST to 13% HST
- Magazines purchased from subscription have increased from 5% GST to 13% HST
- Home Renovations have increased from 5% GST to 13% HST
- Private Resale of Cars have increased from 8% PST to 13% HST
- Gasoline/Diesel have increased from 5% GST to 13% HST
- Massage Therapy Services have increased from 5% GST to 13% HST
- Vitamins have increased from 5% GST to 13% HST
- Hairstylist/Barber have increased from 5% GST to 13% HST
- Esthetician Services (Manicures, Pedicures, Facials) have increased from 5% GST to 13% HST
- Cigarettes and Other Tobacco Purchases have increased from 5% GST to 13% HST

This listing has been adapted from the booklet –What Changes – and what doesn't change – under the HST, paid for by the Government of Ontario.

For a more conclusive list, please refer to [www.ontario.ca/taxchange](http://www.ontario.ca/taxchange).

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Adding Prices/Calculating Taxes
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Any Additional Information:	<ol style="list-style-type: none"><li>1. Begin this activity by adding up the cost for the telephone service on the second invoice. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Continue this activity by calculating the GST and PST for the invoice. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>3. Have the students complete the next invoice calculating the HST.</li><li>4. If students have brought a phone bill from home, go over the steps for adding the prices and calculating the taxes.</li><li>5. Read the list of occupations using this same skill.</li></ol>

## EVERYDAY LIFE ACTIVITY

Let's take a look at a telephone bill from Wonder Phone Systems.

<b>WONDER PHONE SYSTEMS</b>	
<b>Telephone Services for June 2010</b>	
(519) 745-0000	
Monthly Charges for June 1, 2010 – June 30, 2010	
1 Residence Line	\$20.00
1 911 Emergency Service Access	+ .50
1 Touch-Tone Service	+ 2.00
Total Monthly Charges (before tax)	<b>\$22.50</b>
GST (5%)	<u>.90</u>
PST (8%)	<u>1.80</u>
<b>TOTAL DUE</b>	<b>\$25.20</b>

Now, let's complete an invoice from Wonder Phone. Right now we are only going to add up the residence line, emergency service access and touch tone service to calculate the total monthly charge.

## WONDER PHONE SYSTEMS

### Telephone Services for June 2010

(000) 123-4567

Monthly Charges for June 1, 2010 – June 30, 2010

1 Residence Line	\$23.25
1 911 Emergency Service Access	.50
1 Touch-Tone Service	3.25
Total Monthly Charges (before tax)	\$ _____

Getting back to the invoice you have just added up. If your total for the monthly charges was \$27.00 – You were right!

Many of the skills related to these occupations are also found in the everyday life activity of paying bills. Many occupations require this skill to add prices together to find a total. This skill is known as money math. Here are a few examples:

- Food Servers (NOC 6453) – total bills, adding on the provincial and federal taxes
- Cashiers (NOC 6611) – total bills by entering amounts in a cash register or calculator, receive payments and make change
- Light Duty Cleaners (NOC 6661) – calculate the cost of supplies by multiplying unit prices by quantities and totaling them
- Accounting Clerks (NOC 1431) – calculate the amount owing on an account or the amount owed to a customer
- Nursery and Greenhouse Workers (NOC 8432) – prepare invoices for sale items, calculating discounts and taxes

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
3	1 Money Math - determining the total for simple bills.	3 - performs money calculations	Food & Beverage Server (NOC 6453)

Materials Required:	Copy of Workplace Activity 3 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Any Additional Information:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 3 by reading the introduction.</li> <li>2. Have the students complete the bill using the information found on the menu to obtain a subtotal.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (3)

Document: 3  
 Essential Skill  
 Level: 1  
 Skill: Money Math  
 - determining the  
 total for simple  
 bills  
 LBS Level: 3  
 - performs money  
 calculations

Today you are a food server in Grandmom's Kitchen. Below, you will find some orders that have been placed by customers.

1. Complete the bills by using the prices found in the menu.
  - a) Enter the cost of the items ordered
  - b) Add the cost of the items ordered to obtain the subtotal

<b>Grandmom's Kitchen Menu</b>	
<b>GOOD MORNING</b>	
<b>Breakfast Special</b>	
2 eggs, bacon, ham, or sausage, homefries, toast, coffee	\$ 4.00
Pancakes with Strawberry Topping & Whipped Cream	\$ 3.00
Waffles with Chocolate Chips	\$ 3.50
Western Omelette ham, onions, cheese)	\$ 3.75
Cheese Omelette	\$ 3.25
Express Breakfast (bagel, fruit cup, coffee)	\$ 5.00
Big Breakfast (2 eggs, 2 pancakes, bacon, ham, sausage, Fruit cup, coffee)	\$ 8.00
Grandmom's Kitchen	

<u>Date:</u> _____		<u>No. in Party:</u> _____
Quantity	Item	Cost
1	Pancake with Strawberry Topping	
1	Western Omelette	
1	Express Breakfast	
1	Big Breakfast	
	SUBTOTAL	

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
4	2 Money Math - determining the total for invoices including tax	3 - adds, subtracts, multiplies & divides multi-digit whole numbers	Nursery & Greenhouse Workers (NOC 8432)

Materials Required:	Copy of Workplace Activity 4 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Any Additional Information:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 4 by reading the introduction.</li> <li>2. Explain how to calculate a discount. Reinforce the skill by writing the information on a whiteboard or chalkboard.</li> <li>3. Begin the activity by having the students calculate the unit price by the quantity.</li> <li>4. Calculate the 10% discount and subtract it from the subtotal.</li> <li>5. Take the new subtotal and calculate the 13% HST.</li> <li>6. Add the HST to the subtotal.</li> </ol>

## WORKPLACE ACTIVITY (4)

You are working in a greenhouse. Mr. Smith, a small business owner, has placed an order for his outdoor landscaping. He is a really good customer so you give him a discount for his purchase.

How do you calculate a 10% discount on merchandise?

Suppose the flowers cost \$100.00. First, change the 10% discount to a decimal, which is .10 (because you move the decimal over two places to the left). Next, multiply \$100.00 by .10 to obtain your answer. There are four decimal places to account for, therefore, you move the decimal over four places to the left to come up with your answer of \$10.00.

$$\begin{array}{r} \$100.00 \\ \times \quad .10 \\ \hline 00000 \\ 100000 \\ \hline \$10.0000 \end{array}$$

Document: 4  
Essential Skill  
Level: 2  
Skill: Money Math  
- determining the  
total for invoices  
incl. tax  
LBS Level: 3  
- adds, subtracts,  
multiplies &  
divides whole  
numbers  
& decimals

For the following invoice from Pansies and Petunias:

Calculate the amounts by multiplying the quantities by the unit prices.

There is also a 10% discount on the subtotal of the order.

The sales tax is 13% HST.

## PANSIES AND PETUNIAS

Invoice #1

To: Mr. Smith,  
New House Designs, Homewood, Ontario

Quantity	Description	Unit Price	Amount
5	Boxes of multi-coloured pansies	\$12.00/box	
4	Boxes of orange petunias	\$18.00/box	
4	Spikes	\$5.00 each	
10	Trailing Ivy	\$1.99 each	
		Sub Total	
		<b>Subtract</b> 10% Discount	
		New Sub Total	
		<b>Add</b> 13% HST	
		TOTAL	

## COMPUTER ACTIVITIES

Time Allotted:  
45 - 60 minutes

Our first computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**.
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 4**.
- Click on **Paying a Utility Bill**.

The next activity is found on [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**.
- Under the heading Free-Online Learning at GCFLearnFree.org
- Select **Everyday Life**.
- Scroll down to **Pay Bills** and click on it.
- Start Activity by clicking on **Start Activity**.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**.
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **6611-Cashiers** - click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check-Up Tools**.
- Click on **2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice – next.
- Under the heading Numeracy, check **Money Math** and **Level 1**.
- Choose **6681 - Dry Cleaning and Laundry Operations – Claim Check**.
- Check out a Real Workplace Activity Set.
- On-line version – continue.
- Click on Submit Answer for Task 1, 2 and 3 without completing the task and then continue to...
- Complete Task 4 – submit answer.
- Finish Now.
- Enter your information – next.

The next computer activity is also found on the Ontario Skills Passport website:

- Click on the **BACK** button until you reach the page Select One Essential Skill to practice.
- Under the heading Numeracy, check **Money Math** and **Level 2**.
- Scroll down and click on **Next**.
- Click on **Cashiers – Cashier – Invoice and Adjusta Card**.
- Click on **Check out** a Real Workplace Activity Set.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

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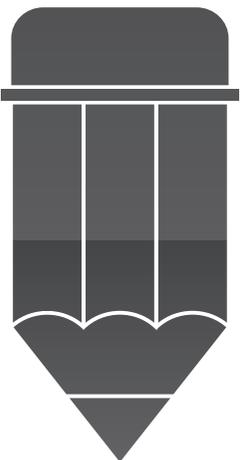
Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS TWO**

Take a look at some of the students telephone bills. If they differ, how do they? How are they similar? Does everyone understand how to read the bill?

Have the students think of other types of invoices or bills they receive. Tonight, they might want to look at some of them and do some practice calculations.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

### Wonder Invoices

	\$23.25		\$23.25
	.50		.50
	<u>3.25</u>		<u>3.25</u>
	\$27.00		\$27.00
GST	1.35	HST	3.51
PST	<u>2.16</u>		
Total	\$30.51	Total	\$30.51

## WORKPLACE ACTIVITY

### **Grandmom's Kitchen**

Quantity	Item	Cost
1	Pancake with Strawberry Topping	\$3.00
1	Western Omelette	3.75
1	Express Breakfast	5.00
1	Big Breakfast	8.00
	<b>SUBTOTAL</b>	<b>\$19.75</b>

## WORKPLACE ACTIVITY

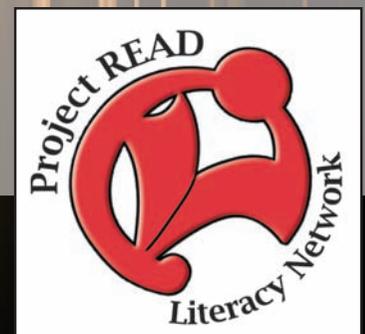
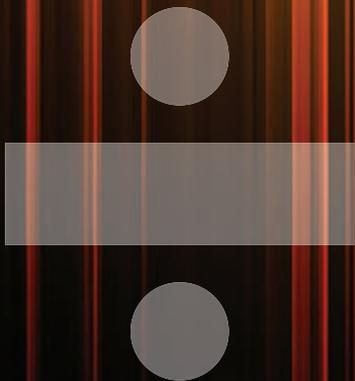
### PANSIES AND PETUNIAS

5	Boxes of Multi-coloured Pansies	\$12.00	\$60.00
4	Boxes of Orange Petunias	18.00	72.00
4	Spikes	5.00	20.00
10	Trailing Ivy	1.99	19.90
	Subtotal		71.90
	Discount (10%)	-	17.19
	New Subtotal		\$154.71
	Tax (13%)	+	20.12
	Grand Total		<u>\$174.83</u>



# CLASS THREE

## Making Change



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Introduction</b>
Purpose:	Read the introduction to the students. The skill of making change or money math is prevalent in the occupations listed.
Materials Required:	This class includes a hands-on activity before the Computer Activity (at the end of the class) using play money. If possible, try to obtain Canadian play money for the activities.
Time Allotted:	30 minutes
Any Additional Information:	A calculator is not required for this class.

# CLASS NUMBER THREE

In this class, we are going to concentrate on the skill of making change.

## Introduction

Many occupations require this skill when they receive payment for an item or service. This skill is called Money Math. Some occupations that incorporate this skill are:

- Bartenders (NOC 6452) – take payments in the form of cash or credit cards and make change. They also count floats and balance cash, credit card and bank withdrawal totals daily, comparing till receipts with the number of drinks sold
- Food and Beverage Servers (NOC 6453) – take payments from customers and make change and total bills, adding on the provincial and federal taxes
- Cashiers (NOC 6611) – total bills by entering amounts in a cash register or calculator, receive payments and make change. They also calculate what the store is owed for unsold stock, such as magazines, which can be returned for partial refund
- Service Station Attendants (NOC 6621) – accept payment from customers and provide change
- Kitchen Helpers and Line Cooks (NOC 6641) – prepare guest checks, enter amounts in the cash register and provide change to customers
- Security Guards and Related Occupations – (NOC 6651) – handle a petty cash account or pay couriers for deliveries
- Truck Drivers (NOC 7411) – collect money for COD deliveries, verifying the bill, receiving payment by cash, credit card or cheque and making change, if necessary
- Bus Drivers, Subway Operators and Other Transit Operators (NOC 7412) – collect cash fares and ensure they are correct. They also can determine the fare required, according to the time of day, number of zones travelled and the age of the passenger
- Delivery Drivers (NOC 7414) – calculate the charge for a delivery, sometimes deducting a coupon

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Making Change
Materials Required:	Copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in making change. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete the Exercise questions 1-3.</li><li>3. Before the students attempt question 4, explain why a customer would give a penny. In other words, so they do not receive all the pennies...</li><li>4. Verbally take up the answers.</li></ol>

## EVERYDAY LIFE ACTIVITY

Today, you'd like to purchase a newspaper from your local convenience store. The copy of the local paper is being sold for \$1.25 today. You give the clerk a toonie and he gives you change. How does he figure out how much to give you?

You can check it in your head like this:

$$\begin{array}{r} \$2.00 \quad (\text{what you gave the clerk}) \\ - \underline{1.25} \quad (\text{the cost of the newspaper}) \\ \hline \$ .75 \quad (\text{your change – three quarters}) \end{array}$$

By calculating this amount of change in your head, you are performing mental math. For example, we estimate our change that we are expecting back when we make purchases for items. In this way, we make sure that we are receiving the correct change. Now that we have a copy of our newspaper, how about a coffee? We travel over to our local coffee shop. A coffee costs \$1.52. All you have is a five dollar bill. How much would you expect in change? Let's do the math.

$$\begin{array}{r} \$5.00 \quad (\text{what you gave the clerk}) \\ - \underline{1.52} \quad (\text{the cost of the coffee}) \\ \hline \$3.48 \quad (\text{your change – a toonie, a loonie, a} \\ \quad \quad \quad \text{quarter, two dimes, three pennies}) \end{array}$$

If you were the clerk accepting the money, how would you count the change back to the customer? The total bill is \$1.52. The clerk would begin with the pennies and say:

- Three pennies makes it \$1.55
- One dime makes it \$1.65
- Another dime makes it \$1.75
- A quarter makes it \$2.00
- A toonie makes it \$4.00
- A loonie makes it \$5.00

## Exercises

1. A friend owes you \$25.75 for a ticket. She gives you \$30.00. How much do you owe her in change? Please show your calculation.

Change Required: \_\_\_\_\_

Then complete the following chart to calculate the number of bills and number of coins you will give her.

Number of Coins:	
\$2.00 (toonie)	_____
\$1.00 (loonie)	_____
\$ .25 (quarter)	_____
\$ .10 (dime)	_____
\$ .05 (nickel)	_____
\$ .01 (penny)	_____

2. You are travelling by cab to see a Broadway musical. The cab ride costs \$21.45. You have decided to tip the cab driver \$5.00. You give the cab driver \$30.00. What change will he give you back? **\*\*Hint: First calculate what your total bill is including the cab ride and the tip\*\***

Change Required: \_\_\_\_\_

Number of Coins:	
\$2.00 (toonie)	_____
\$1.00 (loonie)	_____
\$ .25 (quarter)	_____
\$ .10 (dime)	_____
\$ .05 (nickel)	_____
\$ .01 (penny)	_____

## Exercises

3. You have completed your weekly grocery shopping at your local grocery store. The cashier has totalled all of your purchases and it comes to \$154.28. You give the cashier \$200.00. How much change will the cashier give you back?

Change Required: \_\_\_\_\_

Number of Bills:

\$20.00 (twenty) \_\_\_\_\_

\$10.00 (ten) \_\_\_\_\_

\$5.00 (five) \_\_\_\_\_

Number of Coins:

\$2.00 (toonie) \_\_\_\_\_

\$1.00 (loonie) \_\_\_\_\_

\$ .25 (quarter) \_\_\_\_\_

\$ .10 (dime) \_\_\_\_\_

\$ .05 (nickel) \_\_\_\_\_

\$ .01 (penny) \_\_\_\_\_

4. You treat yourself and your family to a night out for dinner. The bill comes to \$85.51. You give the waiter \$100.00 and one penny. How much change should you expect back?

Change Required: \_\_\_\_\_

Number of Bills:

\$10.00 (ten) \_\_\_\_\_

\$5.00 (five) \_\_\_\_\_

Number of Coins:

\$2.00 (toonie) \_\_\_\_\_

\$1.00 (loonie) \_\_\_\_\_

\$ .25 (quarter) \_\_\_\_\_

\$ .10 (dime) \_\_\_\_\_

\$ .05 (nickel) \_\_\_\_\_

\$ .01 (penny) \_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
4	2 Money Math - determining the total for invoices including tax	3 - adds, subtracts, multiplies & divides multi-digit whole numbers	Nursery & Greenhouse Workers (NOC 8432)

Materials Required:	Copy of Workplace Activity 5 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 5 by reading the introduction.</li><li>2. Have the students complete the subtotal of the bill, the HST, and the amount due.</li><li>3. Have the students calculate how much change is required.</li><li>4. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (5)

Document: 5  
Essential Skill  
Level: 1  
Skill: Money Math  
- determining  
total for simple  
bills and making  
change  
LBS Level: 2  
- adds and  
subtracts multi-  
digit numbers

Now that you have mastered the skill of making change for Everyday Life Activities, let's proceed to a Workplace Activity.

You are working at Grandmom's Kitchen.

- Please complete the guest receipt to the subtotal.
- Calculate the 13% HST on the subtotal.
- Add the HST to the subtotal to obtain the amount due.
- The customer gives you \$20.00.
- How much change would you receive back?

<b>Grandmom's Kitchen Menu</b>	
One Breakfast Special	\$4.00
One Cheese Omelette	\$3.25
One Express Breakfast	\$5.00
	SUBTOTAL
	Taxes
	Amount Due \$

Change Required: \_\_\_\_\_

Number of Bills:

\$10.00 (ten) \_\_\_\_\_

\$5.00 (five) \_\_\_\_\_

Number of Coins:

\$2.00 (toonie) \_\_\_\_\_

\$1.00 (loonie) \_\_\_\_\_

\$ .25 (quarter) \_\_\_\_\_

\$ .10 (dime) \_\_\_\_\_

\$ .05 (nickel) \_\_\_\_\_

\$ .01 (penny) \_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
4	2 Money Math - calculating prices using a formula	3 - performs money calculations	Delivery Driver (NOC 7414)

Materials Required:	Copy of Workplace Activity 6 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 6 by reading the introduction.</li><li>2. Have the students complete the order form by multiplying the quantity by the unit price to obtain the cost.</li><li>3. Add up the costs of the three items to obtain the total.</li><li>4. Subtract the discount coupon from the total to obtain the amount due.</li><li>5. Have the students calculate how much change is required and complete the chart.</li><li>6. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (6)

Document: 6  
Essential Skill Level:  
2  
Skill: Money Math  
- calculating prices  
using a formula  
(regular price  
minus a discount)  
LBS Level: 3  
- performs money  
calculations

You are working for the local lumber store and delivering deck boards to people living in a trailer park several miles away. You are extremely busy this week as the lumber store is celebrating their 10<sup>th</sup> Anniversary and giving all customers a tax exemption!

Complete the order form:

Step 1: Multiply the quantity by the unit price to obtain the cost of the lumber.

Step 2: Deduct the cost of the discount coupon to obtain the amount due.

### LUMBER ONE

Lakeland, Ontario

#### SUPPLY ORDER FORM

Deliver To: Mr & Mrs Jones  
By the Stream, Ontario

Quantity	Item#	Description	Unit Price	Cost
50	1234	12 foot deck boards	\$13.00	\$
2	344	Packages of Nails	\$ 7.20	\$
4	578	Deck Blocks	\$22.00	\$
			Total	\$
			Discount Coupon	\$50.00
			AMOUNT DUE	

1. The customer gives you \$720.00. What change would you give to this customer?

---

Number of Bills:

\$20.00 (twenty) \_\_\_\_\_

\$10.00 (ten) \_\_\_\_\_

\$5.00 (five) \_\_\_\_\_

Number of Coins:

\$2.00 (toonie) \_\_\_\_\_

\$1.00 (loonie) \_\_\_\_\_

\$ .25 (quarter) \_\_\_\_\_

\$ .10 (dime) \_\_\_\_\_

\$ .05 (nickel) \_\_\_\_\_

\$ .01 (penny) \_\_\_\_\_

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 40 minutes

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life**
- Scroll down to **Count Change** and click on it
- Start Activity by clicking on **Start Activity**
- Click on the money (located in the hand) and drag the money to the top of the newspaper

Using this same website – [www.GCFLearnFree.org](http://www.GCFLearnFree.org)

- Click on the **Back** button (located at the top left hand corner of the screen)
- Scroll down to **Cash Back** and click on it
- Select Activity by clicking on **Start Activity**

## HANDS ON ACTIVITY

Time Allotted:  
30 - 45 minutes

Using play money, have students pair up and practice making change.

### Activities to Complete:

1. Ask the students how many ways they could make change for a \$10.00 bill. They could use two \$5.00, or five toonies, ten loonies, etc. Continue with any other denomination.
2. Create a store and have the students count back change for items purchased. The students could be the cashier and then the customer.
3. Make up an invoice on a whiteboard or chalkboard. Have the students calculate the amount owing and then calculate the change to be given back and outline the denominations.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **PRACTITIONER PAGE**

### **HOMEWORK FOR CLASS THREE**

Have students practise making change at home with their families. Get them to count back change to their families and to estimate if they have been given the correct change.

See how many times they can count back change to themselves during a day. Pay attention each time they purchase something. Do a double check to make sure they received the proper change.



## ANSWER KEY FOR THE PRACTITIONER EVERYDAY LIFE ACTIVITY

### Exercises

$$\begin{array}{r r r r} 1. & \$30.00 & - 25.75 & = 4.25 \\ & \text{Coins} & \$2.00 & - 2 \\ & & .25 & - 1 \end{array}$$

$$\begin{array}{r r r r} 2. & \$21.45 & + 5.00 & = 26.45 \\ & \$30.00 & - 26.45 & = 3.55 \\ & \text{Coins} & \$2.00 & - 1 \\ & & \$1.00 & - 1 \\ & & .25 & - 2 \\ & & .05 & - 1 \end{array}$$

$$\begin{array}{r r r r} 3. & \$200.00 & - 154.28 & = 45.72 \\ & \text{Bills} & \$20.00 & - 2 \\ & & \$5.00 & - 1 \\ & \text{Coins} & \$ .25 & - 2 \\ & & .10 & - 2 \\ & & .01 & - 2 \end{array}$$

$$\begin{array}{r r r r} 4. & \$101.01 & - 85.51 & = 14.50 \\ & \text{Bills} & \$10.00 & - 1 \\ & \text{Coins} & \$2.00 & - 2 \\ & & .25 & - 2 \end{array}$$

# ANSWER KEY FOR THE PRACTITIONER

## WORKPLACE ACTIVITY 5

### Grandmom's Kitchen Menu

One Breakfast Special	\$4.00
One Cheese Omelette	\$3.25
One Express Breakfast	\$5.00
SUBTOTAL	\$12.25
Taxes	1.59
Amount Due	\$13.84

$$20.00 - 13.84 = 6.16$$

Number of Bills:		Number of Coins:	
\$5.00	- 1	\$1.00	- 1
		\$ .10	- 1
		\$ .05	- 1
		\$ .01	- 1

## WORKPLACE ACTIVITY 6

Quantity	Item#	Description	Unit Price	Cost
50	1234	12 foot deck boards	\$13.00	\$650.00
2	344	Packages of Nails	\$ 7.20	\$14.40
4	578	Deck Blocks	\$22.00	<u>\$88.00</u>
		Total		\$752.40
		Discount Coupon		\$50.00
		AMOUNT DUE		\$702.40

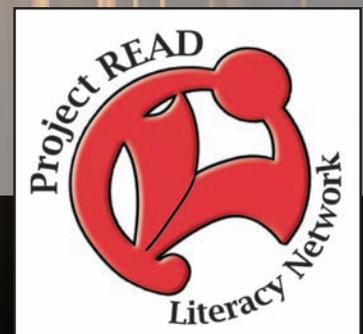
The customer would receive \$17.60 change if \$720.00 was given.

Number of Bills:		Number of Coins:	
\$10.00	- 1	\$2.00	- 1
\$5.00	- 1	\$ .25	- 2
		\$ .10	- 1



# CLASS FOUR

## Monitoring Inventory



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Introduction</b>
Purpose:	Read to the students about the steps involved in preparing a grocery list.
Materials Required:	None
Time Allotted:	15 minutes
Any Additional Information:	A calculator is not required for this class.

## CLASS NUMBER FOUR

Today is grocery day.

What is the first thing you need to do in preparation for this outing? That's right – prepare a grocery list. Let's take a look at the steps involved in this activity.

- Make a chart with ingredients required for each meal.
- Take an inventory of what is needed, that is, take a look in your cupboards and think about what you will need for the upcoming week.
- Try to group the items into categories. This will make it easier to shop in your local grocery store. Some possible categories could be: produce, dairy, meat, pasta, and drinks.
- Once you have arrived at the grocery store, have your list and a pen ready.
- Travel up and down the aisles looking for the items on your list. As you find them, cross them off your list.
- When everything is crossed off your list, proceed to the check out to purchase your items.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Monitoring Inventory
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading over the instructions for the activity.</li><li>2. Have the students complete the grocery list table by taking the number in Column A and subtracting Column B to obtain Column C.</li><li>3. Verbally take up the activity with the students.</li><li>4. Read a list of the occupations using this same skill to the students.</li></ol>

## EVERYDAY LIFE ACTIVITY

This week you are hosting a dinner party for 8 people. The names of the recipes are listed below. A grocery list has been prepared for you. Take a look at the quantities you have on hand and the quantities required for the recipe. To calculate what you need to purchase, follow these steps:

- Column A are the ingredients required for the recipe.
- Column B are the items in your cupboard.
- Column C are the items you need to purchase at the store.

\*\*The first row on the grocery list is done for you. “1 package of spinach is required for the recipe and we do not have one on hand, which means we must purchase 1 package of spinach.\*\*

Listed below are the three recipes you are preparing for your dinner party. You have already looked at the ingredients required for each recipe and established a grocery list.

Spinach Mandarin Salad

Slow Cooker Chili

No Bake Cheesecake

## GROCERY LIST

Column A	Column B	Column C
<b>Produce</b>	<b>On-Hand</b>	<b>To Purchase</b>
1 package of spinach	0	1
1 onion	1	
3 oranges	0	
<b>Meat</b>		
1 pound ground beef	0	
<b>Column A</b>		
<b>Canned Goods</b>		
2 cans Pasta Sauce	0	
1 can Red Kidney Beans	0	
1 package Almonds	1	
1 package Poppy Seeds	0	
1 box Graham Cracker Crumbs	0	
2 packages Jello Powder	0	
<b>Dairy</b>		
2 packages Cream Cheese	0	

In preparing a grocery list, you are monitoring the inventory of your family home. Many occupations monitor inventory of their supplies just like this. They are:

- Grocery Clerks (NOC 6622) – estimate how many boxes of a product are needed to fill available shelf space
- Kitchen Helpers and Line Cooks (NOC 6641) – estimate the amount of food by comparing containers, product sizes and volumes
- Light Duty Cleaners (NOC 6661) – estimate the quantity of supplies such as towels, soap or coffee needed (guest room attendants)
- Nurse Aides, Orderlies and Patient Service Associates (NOC 3413) – estimate the amount of supplies which need to be ordered
- Early Childhood Educator Assistants (NOC 4214) – estimate quantities of materials required to complete teaching activities.

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
7	1 Numerical Estimation - using a formula & procedure in making an estimate	2 - adds & subtracts multi-digit numbers	Early Childhood Education Assistants (NOC 4214)

Materials Required:	Copy of Workplace Activity 7 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 7 by reading the introduction.</li><li>2. Have the students complete the table for quantities of paper, cookie cutters, pencils and glue.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (7)

Early Childhood Educator Assistants estimate and calculate the quantities of materials required to complete a teaching activity.

Today, Susan is having the children understand colours and shapes. She needs to order construction paper, cookie cutters, pencils and glue.

For this activity each child requires: **4 sheets of construction paper, 5 cookie cutters, a pencil, and a bottle of glue.**

Document: 7  
Essential Skill  
Level: 1  
Skill: Numerical  
Estimation  
- using a formula  
& procedure  
in making an  
estimate  
LBS Level: 2  
- adds & subtracts  
multi-digit  
numbers

How many materials should Susan order to complete this activity?

Name of Child	Paper	Cookie Cutter	Pencils	Glue
Emily				
Sally				
Georgia				
Jane				
Linda				
George				
Sam				
Timmy				
Dave				
Scott				
TOTAL				

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
8	2 Numerical Estimation - taking into consideration only a few factors about which most relevant information is known	3 - estimates length of objects	Grocery Clerks (NOC 6622)

Materials Required:	Copy of Workplace Activity 8 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 8 by reading the introduction.</li> <li>2. Read aloud and demonstrate the instructions for measurement calculations to the students. Ratios may also be used for the calculations.</li> <li>3. Have the students complete the Exercises for questions 1 – 3.</li> <li>4. Verbally take up the exercises.</li> </ol>

## WORKPLACE ACTIVITY (8)

Today you are setting up a new section of a supermarket. You need to estimate how many boxes of cereal you need to bring from the stock room to fill this available shelf space.

A smaller version of a cereal box is 3 inches wide. The shelf measures 6 feet long. How many boxes of cereal would fit on one shelf?

In order to complete this activity, you require the additional information:

$$12 \text{ inches} = 1 \text{ foot}$$

To change a large unit of measurement to a small unit of measurement, you multiply. Let's change the measurement of the shelf, currently in feet to inches.

Step 1: You are changing the shelf measurement to inches. The shelf measures 6 feet in length.

Step 2: You have been given the information of 12 inches = 1 foot

Step 3: Multiply  $6 \times 12 = 72$  inches. This would be the shelf measurement.

Document: 8  
Essential Skill  
Level: 2  
Skill: Numerical  
Estimation  
- taking into  
consideration  
only a few  
factors about  
which most  
relevant  
information is  
known  
LBS Level: 3  
- estimates length  
of objects

Now that you know the shelf measures 72 inches, how many cereal boxes would fit on this shelf?

To change a large unit of measurement to a small unit of measurement, you divide.

Step 1: You are calculating how many cereal boxes would fit on a shelf 72 inches long.

Step 2: You have been given the measurement of 72 inches (for the shelf) and 3 inches (for the cereal box).

Step 3: The calculation would be  $72 \div 3 = 24$ . This would be the number of cereal boxes that would fit on a shelf.

## **Exercises**

1. Charlie is using a 3 foot shelf in a grocery store. He is placing 6 inch containers of rice on this shelf. How many containers of rice will fit on the shelf? |  

---
2. Sally is completing a store display for cosmetics. She is organizing colours of foundation on a store shelf. Each package of foundation is 1 inch wide and the shelf is 2 feet wide. How many packages of foundation can Sally fit on the shelf? |  

---
3. Sally is now organizing cosmetic organizers on a shelf. The shelves are 12 feet long and the cosmetic organizers are one foot long. How many shelves would Sally need to accommodate 48 cosmetic organizers? |  

---

## COMPUTER ACTIVITIES

Time Allotted:  
60 minutes

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**.
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life**.
- Scroll down to **Grocery List** and click on it.
- Start Activity by clicking on **Start Activity**.

The next activity is also found on the GCFLearnFree website:

- Click on the **Back** button (located at the top left hand corner of the screen).
- Scroll down to **Check Your Receipt** and click on it.
- Start Activity by clicking on **Start Activity**.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**.
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **4214 – Early Childhood Educator Assistants**- click on the check mark
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check-Up Tools**.
- Click on **2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Numerical Estimation and Level 1**.
- Click on **Next**.
- Choose **3413 – Nurse Aides, Orderlies & Patient Service Associates – Notebook**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Complete Task 1 – submit answer.
- Complete Task 2 – submit answer.
- Complete Task 3 – submit answer.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

- Choose **3413 – Nurse Aides, Orderlies & Patient Service Associates – Notebook.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Complete Task 1 – submit answer.
- Complete Task 2 – submit answer.
- Complete Task 3 – submit answer.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

#### Next Activity

- Click on back button until you see under the heading Numeracy, **Numerical Estimation and Level 1.**
- Choose **7611 – Construction Trades Helpers & Labourers Task Assignment.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Click on Next until you reach Task 4.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

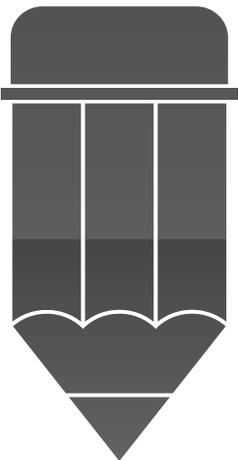
## HOMework FOR CLASS FOUR

We are going to estimate the amount of materials required to complete a project. This activity could be an everyday life or a workplace activity. When you have decided what you would like to accomplish, **write down the list of materials required to purchase.** Some ideas for projects could be or feel free to be creative:

- Building a wooden table
- Preparing a dinner for four people (the recipes)
- Having a craft day with your child (making ornaments, necklaces, etc.)
- Organizing a birthday party
- Organizing a field trip for a class (cost for bus tickets, snacks, etc.)
- Calculating the cost of a staff meeting for work (coffee, snacks, pens, pencils, notebooks, etc.)
- Working for a pet store and purchasing food for the animals

These ideas will be shared at your next class.

Have the students bring grocery flyers for next class as we will be comparison shopping!



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

<b>Column A</b>	<b>Column B</b>	<b>Column C</b>
<b>Produce</b>	<b>On-Hand</b>	<b>To Purchase</b>
1 package of spinach	0	1 package of spinach
1 onion	1	0 onions
3 oranges	0	3 oranges
<b>Meat</b>		
1 pound ground beef	0	1 pound of ground beef
<b>Canned Goods</b>		
2 cans Pasta Sauce	0	2 cans Pasta Sauce
1 can Red Kidney Beans	0	1 can Red Kidney Beans
<b>Baking Supplies</b>		
1 package Almonds	1	0 packages of Almonds
1 package Poppy Seeds	0	1 package Poppy Seeds
1 box Graham Cracker Crumbs	0	1 box Graham Cracker Crumbs
2 packages Jello Powder	0	2 packages Jello Powder
<b>Dairy</b>		
2 packages Cream Cheese	0	2 packages Cream Cheese

## ANSWER KEY FOR THE PRACTITIONER WORKPLACE ACTIVITY 7

Name of Child	Paper	Cookie Cutter	Pencils	Glue
Emily	4	5	1	1
Sally	4	5	1	1
Georgia	4	5	1	1
Jane	4	5	1	1
Linda	4	5	1	1
George	4	5	1	1
Sam	4	5	1	1
Timmy	4	5	1	1
Dave	4	5	1	1
Scott	4	5	1	1
TOTAL	40	50	10	10

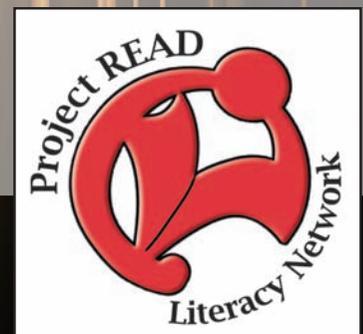
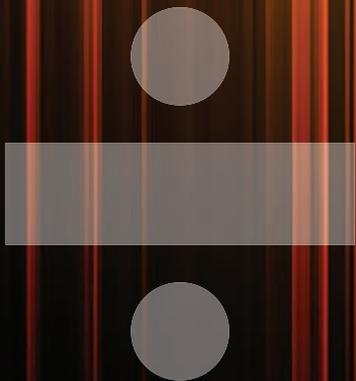
## WORKPLACE ACTIVITY 8

### Exercise

1.  $3 \text{ feet} \times 12 = 36 \text{ inches}$        $36 \div 6 = 6 \text{ containers}$
2.  $2 \text{ feet} \times 12 = 24 \text{ inches}$        $24 \div 1 = 24 \text{ inches}$
3.  $48 \div 12 = 4 \text{ shelves}$

# CLASS FIVE

## Comparing Costs



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Comparing Costs
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in determining the best price for an item. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 &amp; 2.</li><li>3. Read about the occupations that require the skill of comparison shopping.</li></ol>
Additional Information:	A calculator is not required for this class.

## CLASS NUMBER FIVE

Today you are a comparison shopper. You are determined to get the best price on items!

### EVERYDAY LIFE ACTIVITY

You want to reduce your grocery bill. How do you do that? First of all, let's take a look at the weekly flyers.

At your local grocery store tomato sauce is on sale. A 12 ounce can is selling for \$.40. At the local big box store, tomato sauce is 3 cans for \$1.00 of a similar size. Which is the better price?

Step 1: Find the price of one can of tomato sauce at the big box store. The calculation would be \$1.00 divided by 3. This works out to approximately \$.34 per can.

Step 2: The price of the tomato sauce at the local grocery store is \$.40 per can.

Step 3: \$.34 is less than \$.40, so the better deal is at the big box store.

### Exercises

1. Sam's Variety Store is selling pop on sale for 6 bottles for \$1.99. Go Big is selling pop for 3 bottles for \$1.25. Which store is offering the better price?

**\*\*Hint: First calculate the price for one bottle of pop\*\***

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2. Ten pounds of potatoes sell for \$2.00. There are approximately 15 potatoes in the bag. Loose potatoes of the same size sell for \$.20 each. Which is the better buy?
- 

Comparison shopping is very common in many types of occupations. Workers compare costs to find the best value for their money. Following are examples of many ways that workers make comparisons for items or services:

- Early Childhood Educators and Assistants (NOC 4214)– compare classroom supplies for teaching materials and snacks
- Residential & Commercial Installers (NOC 7441a) – compare costs for material when buying in different quantities or from different suppliers
- Construction Trades Helpers & Labourers (NOC 7611) & Other Trades Helpers (NOC 7612) – order parts or materials, seeking the best price
- Cashiers (NOC 6611) – compare totals with cash register receipts and enter results in financial records, reporting surpluses or shortfalls
- Nursery & Greenhouse Workers (NOC 8432) – order stock on a seasonal basis

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
9	1 Scheduling or Budgeting - recording costs in relation to categories	3 - calculates unit prices and uses them to determine best buy	Construction Trades Helpers & Labourers (NOC 7611)
	2 Measurement & Calculation - converting between measurement systems		

Materials Required:	Copy of Workplace Activity 9 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 9 by reading the introduction.</li> <li>2. Have the students complete the Cost Per Item Table.</li> <li>3. The students must first calculate the cost per item.</li> <li>4. They will enter this amount under the company name.</li> <li>5. The final step is to compare the costs between the companies.</li> <li>6. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (9)

You are the owner of BUILDER FOR YOU and need to purchase pressure treated lumber for the upcoming spring season. Take a look at the flyers to determine:

- 1) The cost per item for each of the three building companies – ABC Lumber, Lumber for U, and One Lumber. If it is quoted in per foot prices, you need to calculate what a board would cost in order to compare with the other companies. For example, a five foot fence board for 55 cents per foot would be  $5 \times .55 = \$2.75$  for the deck board.
- 2) Write the name of the building company that has the best price in the last column.
- 3) Calculate the total cost for each company to determine which company has the best overall pricing.

Document: 9  
Essential Skill Level: 1  
Skill: Scheduling or Budgeting  
- recording costs in relation to categories  
Essential Skill Level: 2  
Skill: Measurement & Calculation  
- converting between measurement systems  
LBS Level: 3  
- calculates unit prices and uses them to determine best buy

# PREPARATION PAGE FOR THE PRACTITIONER

## WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
10	2 Scheduling or Budgeting - determining the number of packages to buy, using the number of units required as a basis	4 - given a regular price and a percent to be discounted, calculates total costs, including taxes.	Nursery & Greenhouse Workers (NOC 8432)
	2 Money Math - determine total for accounts including taxes & discounts		

## **ABC LUMBER WEEKLY FLYER**

5 Foot Fence Boards	55 cents per foot
6 Foot Fence Boards	55 cents per foot
10 Foot Fence Boards	55 cents per foot
12 Foot Fence Boards	55 cents per foot
Deck Rail Baluster	\$11.50/5 pack
12 Foot Handrails	90 cents per foot

---

## **LUMBER 4 U**

5 Foot Fence Boards	45 cents per foot
6 Foot Fence Boards	45 cents per foot
10 Foot Fence Boards	45 cents per foot
12 Foot Fence Boards	45 cents per foot
Deck Rail Baluster	\$10.00/5 pack
12 Foot Handrails	85 cents per foot

---

## **ONE LUMBER**

5 Foot Fence Boards	60 cents per foot
6 Foot Fence Boards	60 cents per foot
10 Foot Fence Boards	60 cents per foot
12 Foot Fence Boards	60 cents per foot
Deck Rail Baluster	\$9.00/5 pack
12 Foot Handrails	75 cents per foot

## Cost Per Item

Description	ABC Lumber	Lumber 4U	One Lumber	Best Price
5 Foot Fence Boards				
6 Foot Fence Boards				
10 Foot Deck Boards				
12 Foot Deck Boards				
20 Deck Rail Balusters				
12 Foot Handrails				
Totals				

### PREPARATION PAGE FOR THE PRACTITIONER

Materials Required:	Copy of Workplace Activity 10 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 10 by reading the introduction.</li> <li>2. Have the students complete the purchase order by looking at what supplier offers the best price.</li> <li>3. Calculate the quantity times the best price to determine the total cost.</li> <li>4. Add up the total prices for a subtotal.</li> <li>5. The 20% discount needs to be calculated and the taxes added in to complete the activity.</li> <li>6. Once the students have finished, verbally take up the activity. You might want to show the different calculations on a whiteboard or chalkboard to reinforce the skills.</li> </ol>

## WORKPLACE ACTIVITY (10)

Nursery and Greenhouse Workers order stock on a seasonal basis. They compare the cost of purchasing different flowers, plants and trees from different suppliers to obtain the best price. Sometimes, they not only compare costs but compare special features as well. Look at the following flyers to complete the purchase order. Complete the order form including the discount and taxes.

Joe's Flowers needs to place an order for the following flowers and shrubs to begin to stock his warehouse.

1. First, he needs to determine which flower supplier offers the best prices on each item.
2. Complete the purchase order form for the quantities listed. Include which supplier Joe will purchase the item from and calculate the pricing including the total cost and taxes.
3. In this exercise we are only completing one purchase order for both suppliers. In the workplace, two purchase orders would be completed.

Document: 10

Essential Skill Level: 2

Skill: Scheduling or  
Budgeting

- determine the number  
of packages to buy, using  
the number of units  
required as a basis

Essential Skill Level: 3

Skill: Money Math

- determine total for  
accounts including taxes  
and discounts

LBS Level: 4

- given a regular price  
and a percent to be  
discounted, calculates  
total cost, including pst  
and gst

## FLOWER & SHRUB WAREHOUSE

Impatiens	\$ .99
Geraniums	2.49
Pansies	.99
Osteospemum	3.99
Hostas	\$ 4.99
Ferns	12.99
Rose of Sharon Shrub	15.99
Emerald Cedar	21.00
Rose Shrub	11.99

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## THE RADICAL FLOWERPOTS

Impatiens	\$ .79
Geraniums	2.49
Pansies	.99
Osteospemum	4.99
Hostas	\$ 5.99
Ferns	11.99
Rose of Sharon Shrub	15.99
Emerald Cedar	23.00
Rose Shrub	12.99

## PURCHASE ORDER FROM JOE'S FLOWERS

<b>Quantity</b>	<b>Description</b>	<b>Best Price</b>	<b>Supplier</b>	<b>Total Price</b>
75	Impatiens			
60	Geraniums			
50	Pansies			
25	Osteospermums			
15	Hostas			
15	Ferns			
10	Rose of Sharon Shrubs			
12	Emerald Cedars			
8	Rose Shrubs			
			<b>Subtotal</b>	
			20 % Discount	
			<b>New Subtotal</b>	
			<b>HST (13%)</b>	
			<b>Grand Total</b>	

## COMPUTER ACTIVITIES

Time Allotted:  
60 minutes

Comparison Shop using flyers found on-line. Use Canadian Tire, Home Depot and Home Hardware to compare prices of a particular lawnmower.

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**.
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life**.
- Scroll down to **Compare Labels** and click on it.
- Start Activity by clicking on **Start Activity**.

The next website is [www.mathplayground.com](http://www.mathplayground.com)

- From the Google homepage, enter **math playground**.
- Select **Math Playground**.
- Scroll down to **Math Games** (located on the left hand side of the page) and click on it.
- Scroll down to **Percent Shopping – Troy’s Toys** and click on it.
- Select Level One – find the discount and sale price.
- Select Level Two – find the percent discount.

The next on-line activity is to compare prices on vacation packages.

Go to [www.selloffvacations.com](http://www.selloffvacations.com) to compare vacation packages.

- From the Google homepage, enter **selloffvacations.com**
- Select **Last minute selloffs**.
- Select **Search**.
- Select a hotel that appeals to you and write down the price.
- Scroll towards the bottom of the page to see alternate dates.
- Find the same hotel you looked at before to see if the price has changed.
- Were the prices different?

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

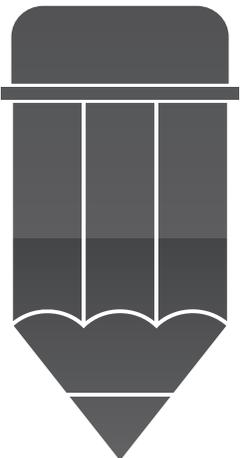
- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills curriculum**.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## PRACTITIONER PAGE

### HOMEWORK FOR CLASS FIVE

What were some of the answers for the homework from Class 4? They were to estimate the amount of materials required to complete a project.

Today, we are going on-line to price out the materials. Have the students check two websites to search for the best price of the item. We are comparison shopping.



## ANSWER KEY FOR THE PRACTITIONER EVERYDAY LIFE ACTIVITY

### Exercises

- $1.99 \div 6 = .33$  each  
 $1.25 \div 3 = .42$  each    Sam's Variety offers the better price.
- $2.00 \div 15 = .13$  each  
 Loose =  $.20$  each    The bag of potatoes offers the better price.

### WORKPLACE ACTIVITY 9

#### Cost Per Item

Description	ABC Lumber	Lumber 4U	One Lumber	Best Price
5 Foot Fence Boards	$.55 \times 5 = \$2.75$	$.45 \times 5 = \$2.25$	$.60 \times 5 = \$3.00$	Lumber 4U
6 Foot Fence Boards	$.55 \times 6 = \$3.30$	$.45 \times 6 = \$2.70$	$.60 \times 6 = \$3.60$	Lumber 4U
10 Foot Deck Boards	$.55 \times 10 = \$5.50$	$.45 \times 10 = \$4.50$	$.60 \times 10 = \$6.00$	Lumber 4U
12 Foot Deck Boards	$.55 \times 12 = \$6.60$	$.45 \times 12 = \$5.40$	$.60 \times 12 = \$7.20$	Lumber 4U
20 Deck Rail Balusters	$11.50 \times 4 = \$46.00$	$10.00 \times 4 = \$40.00$	$9.00 \times 4 = \$36.00$	One Lumber
12 Foot Handrails	$.90 \times 12 = \$10.80$	$.85 \times 12 = \$10.20$	$.75 \times 12 = \$ 9.00$	One Lumber
Totals	\$74.95	\$65.05	\$64.80	One Lumber

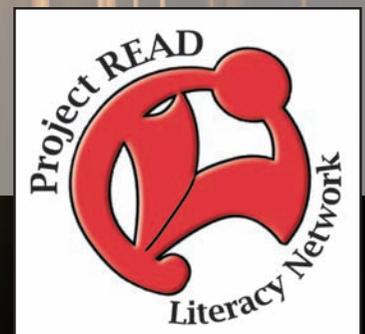
**ANSWER KEY FOR THE PRACTITIONER  
WORKPLACE ACTIVITY (10)**

**PURCHASE ORDER FROM JOE'S FLOWERS**

<b>Quantity</b>	<b>Description</b>	<b>Best Price</b>	<b>Supplier</b>	<b>Total Price</b>
75	Impatiens	\$ .79	Radical Flowerpots	\$ 59.25
60	Geraniums	2.49	Both	149.40
50	Pansies	.99	Both	49.50
25	Osteospermums	3.99	Flowers & Shrubs	99.75
15	Hostas	4.99	Flowers & Shrubs	74.85
15	Ferns	11.99	Radical Flowerpots	179.85
10	Rose of Sharon Shrubs	15.99	Both	159.90
12	Emerald Cedars	21.00	Flowers & Shrubs	252.00
8	Rose Shrubs	11.99	Flowers & Shrubs	95.92
			<b>Subtotal</b>	\$1,120.42
			20 % Discount	\$ 224.08
			<b>New Subtotal</b>	\$ 896.34
			<b>HST (13%)</b>	\$ 116.52
			<b>Grand Total</b>	\$1,012.86

# CLASS SIX

## One Step Measurement



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	One Step Measurement
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in determining square footage of a room. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1, 2, &amp; 3. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>3. Read about the occupations that use this one step measurement skill.</li></ol>
Additional Information:	A calculator is not required for this class.

## CLASS NUMBER 6

Have you ever had to measure the size of a room to determine how much wallpaper or carpeting to purchase? How about calculating the size of your lawn in order to purchase the right amount of fertilizer or grass seed?

### EVERYDAY LIFE ACTIVITY

You are planning a home renovation and require some new wallpaper for your room. Let's see how inches, feet and yards relate to each other.

1) There are 12 inches in 1 foot. There are 3 feet in 1 yard.

How many inches are in a yard? \_\_\_\_\_

2) Wallpaper is usually sold in number of rolls per square foot. How do you calculate square feet? Let's take a look at the diagrams below.

Suppose this is the size of your room, it is 12 feet wide, and 8 feet high.

Step 1: To calculate the area of a room, you multiply length times width. In this case, it would be  $8 \times 12 =$  \_\_\_\_\_.

Step 2: You have just calculated square feet. How would you change the square feet to square inches?

Remember, you are going from a large unit to a small unit, therefore you will multiply. In other words

$$8 \text{ feet} \times 12 \text{ inches} = 96 \text{ inches}$$

$$12 \text{ feet} \times 12 \text{ inches} = 144 \text{ inches}$$

$$96 \text{ inches} \times 144 \text{ inches} = 13824 \text{ square inches}$$

Step 3: Your next step would be to look at the wallpaper packaging. How many rolls do you need for 13824 square inches or 96 square feet?

If you are calculating a room with a ceiling height of 8 feet or less, you would divide the total square footage by 27 (27 square feet per single roll). \*\*This information was obtained from a roll of wallpaper\*\*

To find out the how many rolls of wallpaper you need, the calculation would be  
 $96 \text{ square feet} \div 27 \text{ square feet per single roll} = ?$

Your answer will tell you how many single rolls you would need to purchase. \*\*If the answer is a portion, then round up to the next whole number so you will have enough wallpaper to complete your project.\*\*

This type of calculation is known as one step measurement. Many occupations require the ability to perform one step measurements. Here are examples of a few:

- Retail Sales Associates (NOC 6421) – measure floor space in order to plan for placement of display items
- By-Law Enforcement & Other Regulatory Officers (NOC 6463)- measure the length, width and height of trucks, trailers, and loads to ensure compliance with government regulations
- Dry Cleaning and Laundry Occupations (NOC 6681) – calculate the area of drapes to determine cleaning costs, multiply the area by the cost per square foot
- Residential & Commercial Installers (NOC 7441a) – calculate the area when installing tile
- Heavy Equipment Operators (NOC 7421) – dig basements to required specifications for length, width and depth
- Construction Trades Helpers & Other Labourers (NOC 7611,7612) – measure quantities of cement and water according to instructions on the bag to obtain correct consistency
- Landscaping & Grounds Maintenance Labourers (NOC 8612) – determine number of boxes of plants for a garden considering the number of plants per box and the size of the garden

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
11	2 Measurement & Calculation - calculating areas of familiar shapes	3 - applies formulas for calculating the area of a rectangle	Heavy Equipment Operators (NOC 7421)

Materials Required:	Copy of Workplace Activity 11 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 11 by reading the introduction.</li> <li>2. Work through step 1 to step 3 with the students to make sure they understand the concept of area and volume.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (11)

Document: 11  
Essential Skill  
Level: 2  
Skill: Measurement  
& Calculation  
- calculating areas  
of familiar shapes  
LBS Level: 3  
- applies formulas  
for calculating the  
area of a rectangle

Today you are working for Polly's Pools. You are digging the holes for two community pools. There is one community pool for adults that measures 12 feet wide and 40 feet long. This pool will be 5 feet deep.

The other pool is for children and measures 12 feet wide and 40 feet long. This pool will be 3 feet deep.

Step 1: Calculate the square footage of the pools.

---

Step 2: The next issue is how deep do we need to dig the holes for the adult pool and the children's pool?

Let's draw a picture

Suppose this is the size of your pool,  
it is 12 feet wide, and 40 feet long.

How deep should you dig for the adult's pool?

---

How deep should you dig for the children's pool?

---

Step 3: To calculate the volume of the pool, we first calculate the area, which is length times width. We take this measurement and multiply it by the depth.

Formula for Volume = length x width x depth \*\*Volume is always shown in cubic feet or whatever measurement you are using\*\*

The volume for the adult's pool would be:

---

Let's use metric measurements this time.

Another pool is 8 metres wide and 24 metres long. What is the area of the pool?

\*\*This answer will be square metres\*\*

1) If this pool was 3 metres deep, what is the volume of the pool?

\*\*This answer should be in cubic metres.

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## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
12	2 Measurement & Calculation - calculating areas of familiar shapes	3 - applies formulas for calculating the area of a rectangle	Landscaping & Grounds Maintenance Labourers (NOC 8612)

Materials Required:	Copy of Workplace Activity 12 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 12 by reading the introduction.</li> <li>2. Have the students draw a picture of the garden.</li> <li>3. Have students answer step 1 to step 3. You may want to show the calculations on a whiteboard or chalkboard for further understanding</li> <li>4. Verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (12)

You are working at the local greenhouse called Pansies and Petunias. You are completing a landscaping job for Mr. & Mrs. Flower. First you need to measure the size of the garden to determine the number of flowers to plant.

- 1) The garden measures 10 feet long by 10 feet wide

Draw a picture of the garden showing the measurements.

- 1) If the garden is 10 feet long and 10 feet wide, what is the square footage of the garden?  
\_\_\_\_\_

- 2) Each plant requires 4 square feet. How many plants would you need for this garden size? \*\*Take the square footage and divide by the number of square feet each plant requires\*\* \_\_\_\_\_

- 3) The garden requires mulch. The mulch needs to be 3 inches deep. How many cubic feet of mulch do you need to purchase?

- 4) There is 3 cubic feet per bag of mulch. How many bags of mulch do you require?  
\_\_\_\_\_  
\_\_\_\_\_

Document: 12  
Essential Skill  
Level: 2  
Skill: Measurement  
& Calculation  
- calculating areas  
of familiar shapes  
LBS Level: 3  
- applies formulas  
for calculating the  
area of a square

## COMPUTER ACTIVITIES

Time Allotted:  
60 minutes

The first website is [www.funbrain.com](http://www.funbrain.com)

- From the Google homepage type funbrain.
- Click on **Funbrain.com** – The Internet’s #1 Education Site.
- Click on **All Games** (located at the upper right hand corner of the screen).
- Under the **Numbers** section, click on **Measure It!**
- Start at easy cm, then proceed to medium and hard.
- Start at easy inches, then proceed to medium and hard.

The next website is [www.onlinemathlearning.com](http://www.onlinemathlearning.com)

- From the Google homepage, type onlinemathlearning.com
- Select **Math Games** on sidebar.
- Find **Measurement Games**.
- Select **Units of Measures**.
- Play the Game.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**.
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **8432-Nursery & Greenhouse Workers** –click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Measurement & Calculation – Level 1**.
- Click on **Next**.
- Choose **8432-Nursery & Greenhouse Workers Landscape Design**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the **Numeracy-Measurement & Calculation – Level 2**.
- Click on **Next**.
- Choose **7611 – Construction Trades Helpers & Labourers Calculating Materials**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.
- Click on the Back button until you reach the page with **7611-Construction Trades Helpers & Labourers Floor Plan**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

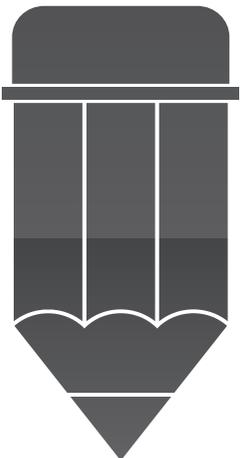
Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS SIX**

Today we are going to look at all of the cost comparisons for projects that were completed last class.

In preparation for tomorrow's class, please bring in a receipt or bill from a restaurant or from something you have purchased. You will be looking at how calculations are made.



## ANSWER KEY FOR THE PRACTITIONER

### Everyday Life Activity

- 1) 36 inches in a yard
- 2)  $3\frac{1}{4}$  rolls of wallpaper, therefore 4 rolls of wallpaper are needed to complete the project.

### Workplace Activity (11)

Step 1:  $L \times W = 40 \times 12 = 480$  square feet

Step 2: Adult Pool = 5 feet deep

Children's Pool = 3 feet deep

Step 3: Adult Pool =  $40 \times 12 \times 5 = 2,400$  cubic feet

Children's Pool =  $40 \times 12 \times 3 = 1,440$  cubic feet

Metric Area = 192 square metres long

1) Volume = length  $\times$  width  $\times$  depth

$$24 \times 8 \times 3 = 576 \text{ cubic metres}$$

### Workplace Activity (12)

1)  $10 \times 10 = 100$  square feet

2)  $100 \div 4 = 25$

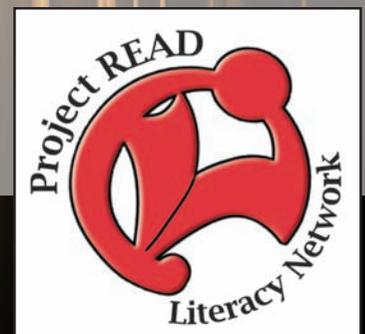
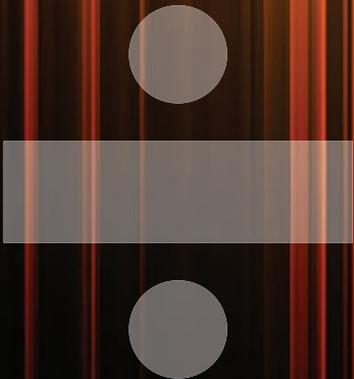
3)  $10 \times 10 \times 3 = 300$  cubic feet of mulch

4)  $300 \div 3 = 100$  bags of mulch



# CLASS SEVEN

## Calculating Tax



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Calculating Tax
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in calculating sales tax. This is a review from a previous class.</li><li>2. After you go over the activity with the students, have them calculate HST on other items for practise of skills.</li><li>3. Read aloud to the students the occupations that use this same calculation skill.</li></ol>

# CLASS NUMBER SEVEN

In this class, we are going to look at calculating sales tax on purchases.

## EVERYDAY LIFE ACTIVITY

You've had your eye on that beautiful red sports car for some time now. Just how much will it cost you?

You visit your local car dealership to take the car for a test drive. WOW – that was an awesome feeling!!! Now you are speaking with the salesperson to find out exactly the cost of purchasing that car. The car is going to set you back \$20,000. However, that's not all, there's the taxes and shipping to be added on.

Base Price of Sports Car	\$20,000
Harmonized Sales Tax (HST)	2,600
Freight	<u>800</u>
<b>Total</b>	<b>\$23,400</b>

Here's a refresher on how to calculate sales tax:

13% = .13 (move the decimal point to the left two places)

$$\begin{array}{r} \$20,000 \\ \times \quad .13 \\ \hline 60000 \\ \underline{200000} \\ \hline \end{array}$$

**\$260000 = 2600.00 (because of the two decimal places .13)**

Many occupations use this same skill known as money math. Some of the occupations are:

- Food & Beverage Servers (NOC 6453) – total bills, adding on provincial and federal tax
- Visiting Homemakers, Housekeepers & Related Occupations (NOC 6471) – shop for clients, count change and complete expense forms
- General Office Clerks (NOC 1411) – prepare invoices and billing reports for clients
- Customer Service Representatives (NOC 1433) – fill out group reservations
- Trappers & Hunters (NOC 8442) – calculate earnings by multiplying the number of pelts by the price per pelt and subtracting expenses

Activity Name:	<b>Calculator Use</b>
Purpose:	Reinforce the Basic Skills for using the calculator.
Materials Required:	Copy of Basic Calculator Use (pages 7-6 to 7-9) handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	1. Begin this activity by reading the pages to the students. Have the students complete the exercises. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.

# PREPARATION PAGE FOR THE PRACTITIONER

## BASIC CALCULATOR USE

Sometimes, in the workplace, workers will use calculators to find totals for invoices.

The calculator is one of the most useful math tools for the workplace. Let's take a look at some of the basic functions of the calculator.

- There is either a button or switch on your calculator that turns it on or off.
- The numbers from 0 to 9 appear on your calculator.
- There is a button (marked .) for a decimal point.
- Adding (+), Subtracting (-), Multiplying (x), Dividing ( $\div$ ) represent the major math operations.
- An equal (=) sign is also there.

This is how you would input the following addition problem:  $4 + 6$

Step 1: Press the 4 button

Step 2: Press the + (addition) button

Step 3: Press the 6 button

Step 4: Press the = (equal) button

The last button you press is always the equal sign (=). Your answer (10) appears on the screen of the calculator.

To complete another problem, press the clear button. A zero should appear on the screen of the calculator.

Let's calculate  $5 + 8 =$

**\*\*Before we press the equal sign (=), we realize that we pressed 7 by mistake when we meant to press 8.\*\***

To correct this error, we press the CE (clear error) button and press 8, then press the equal sign for our new total. The number 13 should appear on your screen.

## Handout

Let's practice on our calculators. Just write the numbers or signs as you would press them on the calculator. The first one is done for you.

1) 5 plus 5       $5 + 5 =$

2) 48 minus 12      \_\_\_\_\_

3) 72 times 4      \_\_\_\_\_

4) 36 divided by 9      \_\_\_\_\_

5) four hundred and two divided by thirty-six      \_\_\_\_\_

6) multiply 99 by 10      \_\_\_\_\_

7) Add 24, 16, 15, and 9      \_\_\_\_\_

8) Add 2, 4, 9, 7, 6, 3, and 1.0

**\*\*Hint:** when you have a zero after the decimal point such as 1.0, you don't need to enter the zero or the decimal.**\*\***

\_\_\_\_\_

9) 63 plus 7; then divide by 4; then add 3.6, then multiply by 2

**\*\*Hint:** the equal sign is only pressed at the end of the problem.**\*\***

\_\_\_\_\_

10) Add these dollar amounts: \$11.29, \$6.04, \$2.32, \$1.19

**\*\*Hint:** don't worry about the dollar sign, but press the addition sign between the amounts.**\*\***

\_\_\_\_\_

## Pressing Buttons in the Right Order

It is very important the buttons on the calculator are pressed in the right order.

In order to divide 20 by 5, you would press  $20 \div 5 =$

If the problem is stated: Divide 5 into 20 – what would you press?

That's right!!!  $20 \div 5 =$

OR, 20 minus 4       $20 - 4 =$

Subtract 4 from 20       $20 - 4 =$

Or take \$4.00 off \$20.00       $20 - 4 =$

## Handout

In this exercise, you will write the numbers as you would press them on your calculator. Then, write the answer. The first one is done for you.

- 1) Divide 5 into 25     $25 \div 5 = 5$
- 2) Subtract 3.29 from 42.95    \_\_\_\_\_
- 3) Divide 3.7 into 21    \_\_\_\_\_
- 4) Subtract \$24.15 from \$124.15    \_\_\_\_\_
- 5) A sweater is \$3.00 off the regular price of \$41.97.  
What is the price of the sweater?    \_\_\_\_\_

## Making (Cents) Out of the Answer the Calculator Gives

When calculating money problems on the calculator, you need to keep in mind the last zero is always dropped.

For example, \$13.00 divided by \$2.00 equals \$6.50, but on the calculator, it will show 6.5. You need to remember to put the missing zero back in.

Another answer needing to be changed is when you have to round the answer up or down. Keep in mind you are calculating dollar amounts, which means there are only two places after the decimal point. This is known as rounding to the nearest hundredth.

For example, if you calculated an answer of \$3.231, you look at the number 3 after the decimal point (in the hundredths place). If the number to the right of this number (in the thousandths place) is 4 or under, you leave the number as is (\$3.23) and only keep two places behind the decimal point.

3.231 rounds to 3.23

If the answer happened to be \$3.236, the correct answer would be \$3.24 because the number 6 (in the thousandths place) increases the number 3 (in the hundredths place) by one.

3.236 rounds to 3.24

## Exercise

Please round the following dollar amounts to the nearest hundredth place (or two decimal places after the decimal). The first one is done for you.

Let's try a few dollar amounts and round up or down. \*\*Remember, if the number to the right of the second decimal place is 0 – 4, the number remains the same. If the number to the right of the second decimal place is 5 – 9, the number increases by one.\*\*

1) 7.348 \_\_\_\_\_ 7.35 \_\_\_\_\_

2) 32.005 \_\_\_\_\_

3) .9330 \_\_\_\_\_

4) 2.004 \_\_\_\_\_

5) 2.650 \_\_\_\_\_

6) 93.167 \_\_\_\_\_

7) 209.098 \_\_\_\_\_

8) .555 \_\_\_\_\_

9) 40.801 \_\_\_\_\_

10) 99.999 \_\_\_\_\_

## CALCULATOR FUN

Calculators can make words as well as numbers. After you complete the calculations below, turn the calculator over to uncover the word. Write the word next to the calculation.

1)  $3651 + 1986 =$  \_\_\_\_\_

2)  $0.0123 + 0.0668 =$  \_\_\_\_\_

3)  $155699 + 223107 =$  \_\_\_\_\_

4)  $169 \times 2 =$  \_\_\_\_\_

5)  $103 \times 6 =$  \_\_\_\_\_

6)  $5632 + 2082 =$  \_\_\_\_\_

7)  $0.8968 - 0.1234 =$  \_\_\_\_\_

8)  $47681 - 12345 =$  \_\_\_\_\_

9)  $0.45 - 0.43 =$  \_\_\_\_\_

10)  $1377 \times 4 =$  \_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
13	1 Money Math - determining the total for simple bills	1 - completes addition chart	Visiting Homemakers, Housekeepers & Related Occupations (NOC 6471)

Materials Required:	Copy of Workplace Activity 13 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 13 by reading the introduction.</li> <li>2. Have the students complete the staff expense claim form.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (13)

Document: 13  
Essential Skill  
Level: 1  
Skill: Money Math  
- determining the  
total for simple bills  
LBS Level: 1  
- completes addition  
chart

Today, you are employed by Homemakers R Us. You have completed your weekly duties of shopping for your client.

- An expense form is required by your employer in order to reimburse you for your expenses.
- Add up the amounts in the cost column to obtain a TOTAL.

### HOMEMAKERS R US STAFF EXPENSE CLAIM FORM

NAME: \_\_\_\_\_

CLIENT'S NAME: \_\_\_\_\_

Date	Description of Item Purchased	Cost
Monday, May 31, 2010	Groceries at ABC Grocery Store	\$ 84.25
Tuesday, June 1, 2010	Prescription Refill – Sam's Pharmacy	\$110.00
Wed., June 2, 2010	Dry Cleaning – Clean Clothes, ETC.	\$ 22.00
Thurs., June 3, 2010	Books – Read 2 Me	\$ 18.40
	<b>TOTAL</b>	\$

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
13 A	2 Money Math - determining the total for invoices that include tax	3 - calculates tax (multiplies whole numbers and decimals)	Visiting Homemakers, Housekeepers & Related Occupations (NOC 6471)

**\*\*THIS ACTIVITY HAS BEEN ADDED AS AN ADDITIONAL ACTIVITY TO WORKPLACE 13 FOR A CHALLENGE\*\***

Materials Required:	Copy of Workplace Activity 13 A to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 13 A by reading the introduction.</li> <li>2. Have the students complete the staff expense claim form.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (13 A)

We have added up the total cost for the Staff Expense Claim Form.

- Below is a listing of items and the HST on those items:

Groceries	0%
Prescription Refill	0%
Dry Cleaning	13%
Books	5%

- Calculate the taxes on the appropriate items on the table below.

- To calculate the Harmonized Sales Tax on your calculator, follow the steps below:

Step 1: Enter the amount in the cost column.

Step 2: Press the multiplication button (x).

Step 3: Enter the 13 (for the tax). \*\*Only enter this amount for some of the items\*\*

Step 4: Press the Percent Button (%)

Step 4: Write this number in the Tax Total column.

Step 5: Press the Addition Button (+). Then press the equal button (=) to obtain the total

Step 6: Add up the total column to obtain the Grand total for reimbursement.

Date	Item	Cost	Tax Total	Total (Cost + Tax Total)
May 31, 2010	Groceries	\$ 84.25		
June 1, 2010	Prescription	\$110.00		
June 2, 2010	Dry Cleaning	\$ 22.00		
June 3, 2010	Books	\$ 18.40		
	<b>GRAND TOTAL</b>	\$		

# PREPARATION PAGE FOR THE PRACTITIONER

## WORKPLACE ACTIVITY

Workplace Activity			
ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
14	<p style="text-align: center;">2</p> <p>- calculating prices using a formula</p> <p style="text-align: center;">3</p> <p>Money Math</p> <p>- determining the total for bills that include calculation of 2 or more, i.e. discount &amp; tax</p>	<p style="text-align: center;">4</p> <p>- calculates total cost, including taxes</p>	Customer Service Representative (NOC 1433)

Materials Required:	Copy of Workplace Activity 14 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 14 by reading the introduction.</li> <li>2. Have the students complete the staff expense claim form including the tax total for the grand total for reimbursement.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (14)

Today, you are employed by a local hotel chain as a customer service representative. You have been contacted by one of your most important group contacts – Miss H. GoLucky to arrange a hotel stay for a group of senior citizens traveling through your city enroute to Ottawa, Ontario. Please complete the group reservation invoice by:

- 1) Inserting the date, and
- 2) Calculating the costs of the services provided to obtain a **TOTAL**.

Document: 14

Essential Skill Level: 2

Skill: Money Math

- calculating prices using a formula

Essential Skill Level: 3

Skill: Money Math

- determining the total for bills that include calculation of 2 or more discount, tax)

LBS Level: 4

- calculates total cost, including taxes and discount

# FANTASTIC FOUR HOTELS GROUP RESERVATION

Date: \_\_\_\_\_

**Reservation Made For:** Miss H. GoLucky  
 Travel Entrepreneur  
 Let's Have Fun Travel Group  
 Travelocity, Ontario

Description	Item	Cost
Breakfast for 28 adults	\$8.00 per person	
1 Night Accommodation in Deluxe Rooms For 25 adults	\$95.00 per person	
1 Night Accommodation in Standard Rooms For 3 adults	\$65.00 per person	
	<b>SUBTOTAL</b>	
	<b>DISCOUNT (-10%)</b>	
	<b>SUBTOTAL</b>	
	<b>TAXES (+13%)</b>	
	<b>TOTAL</b>	

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

- 1) Under Google – type **alpharoute**
- 2) Select **Alpharoute – Home 199.71.28.160/**
- 3) Click on **Do Activities.**
- 4) Click on **Employment Area.**
- 5) Click on **Skills at Work – Activities.**
- 6) Click on the “**Go There Now**” button.
- 7) Complete Activities.

Our second computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge.**
- Select **The Learning Edge** at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 6.**
- Click on **Is Your Paycheque Accurate?**
- Complete the Activity.

The next website is [www.mathplayground.com](http://www.mathplayground.com)

- From the Google homepage, enter **math playground.**
- Select **Math Playground.**
- Scroll down to **Math Games** (located on the left hand side of the page) and click on it.
- Scroll down to **Calculator Chaos** and click on it.
- Select **Level One.**
- Press **Begin.**
- Continue with **Level Two, Three and Four.**

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

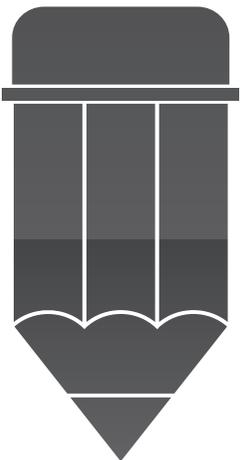
- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS SEVEN**

Take a look at the bill or receipt you brought with you. How much tax did you pay? Were there any other charges included, such as delivery?



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

$$\$20,000 \times .13 = \$2,600.00$$

### Basic Calculator Use

#### Handout

- 1)  $25 \div 5 = 5$
- 2)  $42.95 - 3.29 = 39.66$
- 3)  $21 \div 3.7 = 5.68$
- 4)  $124.15 - 24.15 = 100.00$
- 5) 38.97

### Exercise - Rounding

- |          |            |
|----------|------------|
| 1) 7.35  | 6) 93.17   |
| 2) 32.00 | 7) 209.10  |
| 3) .93   | 8) .56     |
| 4) 2.00  | 9) 40.80   |
| 5) 2.65  | 10) 100.00 |

### Calculator Fun

- |           |          |
|-----------|----------|
| 1) LEGS   | 6) HILL  |
| 2) IGLOO  | 7) HELLO |
| 3) GOBBLE | 8) GEESE |
| 4) BEE    | 9) ZOO   |
| 5) BIG    | 10) BOSS |

## WORKPLACE ACTIVITY (13)

$$\begin{array}{r} \$ 84.25 \\ 110.00 \\ 22.00 \\ \hline 18.40 \\ \hline \$234.65 \end{array}$$

## ANSWER KEY FOR THE PRACTITIONER

### WORKPLACE ACTIVITY (13 A)

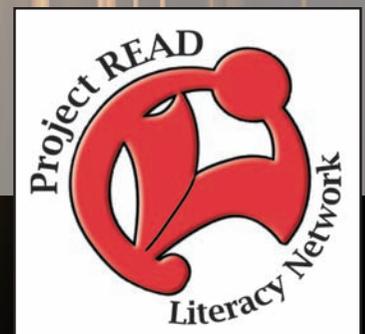
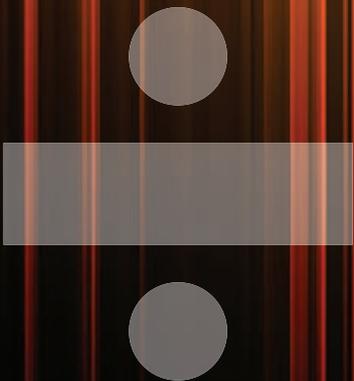
Item	Tax	Total
Groceries	0	\$ 84.25
Prescriptions	0	110.00
Dry Cleaning	2.86	24.86
Books	.92	<u>19.32</u>
	TOTAL	\$238.43

### WORKPLACE ACTIVITY (14)

Breakfast	28	8.00	\$224.00
Accommodation	25	95.00	\$2,375.00
Accommodation	3	65.00	<u>\$195.00</u>
		Subtotal	\$2,794.00
		10% Discount	<u>279.40</u>
		Subtotal	2,514.60
		13% Tax +	<u>326.90</u>
		Grand Total	\$2,841.50

# CLASS EIGHT

## Scheduling



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Calculating Time
Materials Required:	If you have access to a teaching clock, this might reinforce some of the skills the students are learning. A copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the concept of time and showing the students on a clock.</li><li>2. Have students complete Exercise questions 1 to 4.</li><li>3. Take up the answers to the questions with the students.</li></ol>

## CLASS NUMBER 8

Have you ever wondered just how we get through life with all the appointments and commitments the average person has? In this lesson, we are going to look at the steps we take for granted in successfully getting to work on time or making that scheduled doctor's appointment.

### EVERYDAY LIFE ACTIVITY (1)

Let's refresh our memory.

60 seconds = 1 minute                  60 minutes = 1 hour                  24 hours = 1 day

When we look at a clock, there are 60 marks. Each mark stands for 1 minute. On a clock, there are two hands. The large hand (or the minute hand) makes a complete circle past all 60 marks in one hour.

The numbers 1 to 12 are found on the clock. Each number stands for one hour. In a day, the small hand (or the hour hand) makes two complete circles past all 12 numbers (since there are 24 hours in a day).

### Exercises

- 1) Joe spent 45 minutes raking the leaves on Monday afternoon. He spent 30 minutes cutting the lawn on Tuesday morning. How long, in total, did Joe spend on yard work on Monday and Tuesday?

Step 1: Add the total number of minutes.

Step 2: There are 60 minutes in an hour. Is your answer larger than 60 for step 1? If so, your answer will be at least one hour.

Step 3: After you have deducted the number of hours (or 60 minutes), how many minutes are left over? This would be your number of minutes.

Answer: \_\_\_\_\_ hour + \_\_\_\_\_ minutes

- 2) How many minutes are there in 3 hours? **\*\*Hint: there are 60 minutes in one hour\*\***
- 3) How many hours are there in 2 days? **\*\*Hint: there are 24 hours in one day\*\*** If it took you 72 hours to drive from California to Ontario, how many days did it take?  
**\*\*Hint: there are 24 hours in one day**

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Calculating Hours of Work
Materials Required:	If you have access to a teaching clock, this might reinforce some of the skills the students will be learning. A copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	20 - 30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the concept of time and showing the students on a clock. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 to 4.</li><li>3. Verbally take up the answers to the questions 1 – 4.</li><li>4. Show how to calculate minutes to fractions to decimals before attempting question 5. Have the students complete this question.</li><li>5. Read about the occupations that require this skill of scheduling.</li></ol>

## EVERYDAY LIFE ACTIVITY 2

It is a very important skill to understand the concept of time. When we fill out our time sheets for our employers, this skill is used.

### Hours Worked

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
IN	9:00	9:30	10:00	8:30	9:00
OUT	2:30	3:30	4:00	5:00	12:00

- 1) On Monday, Jack Jones worked from 9:00 – 2:30. How many hours did he work? Please follow these steps to reach the answer:
- Step 1: Jack worked for some hours in the morning and some hours in the afternoon.
- Subtract 9:00 from 12:00 to get the hours worked in the morning  
 $12 - 9 = 3$  hours
  - In the afternoon, he worked from 12:00 to 2:30. To calculate this time, you would begin to count from 12:00.  
12:00 to 1:00 = 1 hour  
1:00 to 2:00 = 1 hour  
2:00 to 2:30 =  $\frac{1}{2}$  hour or .5 hour or 30 minutes  
TOTAL            2  $\frac{1}{2}$  hours or 2.5 hours or 2 hours and 30 minutes
  - Add the 3 hours for the morning to the hours worked in the afternoon to calculate the total hours he worked.  
 $3 + 2 \frac{1}{2}$  hours = **5  $\frac{1}{2}$  hours**  
 $3 + 2.5$  hours = **5.5 hours**  
 $3 + 2$  hours 30 minutes = **5 hours and 30 minutes**

- 2) On Tuesday, Jack Jones worked from 9:30 – 3:30. How many hours did he work?
- Calculate the morning hours. \_\_\_\_\_
  - Add the morning hours to the afternoon hours to obtain your total hours worked.
- 
- 3) Total the number of hours worked for the remainder of the week.
- 
- 
- 4) If Jack received a one hour unpaid lunch on Thursday, how many hours would he be paid for?
- 
- 5) From question 1, we see how fractions relate to decimals. For example, 30 minutes is equal to .5 because  $30/60$  equals  $3/6$  or  $1/2$  or .5. Complete the following table for calculating fractions to decimals. The first calculation has been done for you

Time	Fraction	Decimal
30 minutes	$30/60$ or $3/6$ or $1/2$	.5
15 minutes		
45 minutes		

When we calculate the number of minutes, hours or days that have passed, we are using a skill known as scheduling. Many workers use scheduling or budgeting and accounting in order to complete their daily duties. Here are a few examples:

- Letter Carriers (NOC 1462) & Couriers, Messengers (NOC 1463) – prepare route schedule, detailing how long each section of the route should take and when and where to stop for lunch, considering factors such as making connections with transportation vehicles
- Dispatchers & Radio Operators (NOC 1475) – adjust deliveries, assessing road and weather conditions, routes and distances
- Other Assisting Occupations in Support of Health Services (NOC 3414b) – book appointments considering equipment required and mobility of patient and adjust appointments for cancellations and emergencies
- Early Childhood Educators & Assistants (NOC 4214) – create schedule of learning activities to accommodate child’s learning needs
- Travel Counsellors (NOC 6431) – schedule itineraries for clients, taking into account time zones and the amount of time required to make transportation connections
- Hotel Front Desk Clerks (NOC 6435) – accept or reject incoming requests for room reservations, considering the reservation schedule
- Hunting Guides (NOC 6442b) – plan trip schedules to establish times for departure, travel, hunting activities, meals and return
- Maitres d’hôtel & Host/Hostesses (NOC 6451)- create weekly staffing schedules
- Estheticians, Electrologists & Related Occupations (NOC 6482) – schedule appointments, taking into account time needed for different services
- Pet Groomers (NOC 6483) – schedule appointments
- Security Guards (NOC 6651) – schedule weekly time schedules and calculate overtime

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

<b>ACTIVITY NUMBER</b>	<b>ESSENTIAL SKILL LEVEL &amp; SKILL</b>	<b>LBS LEVEL &amp; SKILL</b>	<b>N.O.C.</b>
15	1 Scheduling - making entries	2 - writes daily schedule	Pet Groomers (NOC 6483)

Materials Required:	Copy of Workplace Activity 15 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 15 by reading the introduction.</li><li>2. Have the students complete the appointment schedule for the dogs.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (15)

Document: 15  
Essential Skill  
Level: 1  
Skill: Scheduling or  
Budgeting & Accounting  
- making entries  
LBS Level: 2  
- writes daily schedule

Today, you are working at Charlie's Curls. It is a local pet grooming salon for dogs.

- Several pets are in need of appointments for the next week.
- Complete the following appointment schedule for the following dogs:

<u>Name of Dog and Grooming</u>	<u>Day Requested</u>
<u>Misty - bath, brush and hair dry</u>	<u>Wednesday</u>
<u>Cooper - bath</u>	<u>Friday</u>
<u>Mickey - toe nail clipping</u>	<u>Tuesday</u>
<u>Candy - bath, brush and hair dry</u>	<u>Thursday</u>
<u>Shania - bath</u>	<u>Wednesday</u>
<u>Katie - bath, brush and hair dry</u>	<u>Tuesday</u>
<u>Connor - bath</u>	<u>Friday</u>
<u>Charles - bath, brush and hair dry</u>	<u>Thursday</u>

**Time Allowed for Grooming****Short Form for Service**Allow **two** hours for bath, brush and hair dry

B/B

Allow **one** hour for bath and air dry

Bath

Allow **30 minutes** for toe nail clipping

Toes

\*\*The first scheduled appointment has been inserted into the table for you\*\*

\*\*Lunch is from 12:30 p.m.– 1:00 p.m.

***CHARLIE'S CURLS  
APPOINTMENT SCHEDULE***

Start Time		TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00			Misty – B/B		
10:30			Misty – B/B		
11:00			Misty – B/B		
11:30			Misty – B/B		
12:00					
12:30		<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>
1:00					
1:30					
2:00					
2:30					
3:00					
3:30					
4:00					

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
16	2 Scheduling - determining the number of workers required & amount of time needed to complete a job	4 - calculates time it will take to complete a job	Construction Trades Helpers & Labourers (NOC 7611 & 7612)

Materials Required:	Copy of Workplace Activity 15 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 15 by reading the introduction.</li> <li>2. Have the students complete the appointment schedule for the dogs.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (16)

Document: 16  
Essential Skill  
Level: 2  
Skill: Scheduling  
- determining the number of workers required and amount of time needed to complete the job  
LBS Level: 4  
- calculates time it will take to complete a job

Today you are employed by D & S Construction.

- Your client requires several home renovation projects to be completed at his home.
- By checking the availability of the staff, set up a schedule in order to complete the job on time.

Here is a list of all the home renovation projects your client requires:

- **Installation of 3 new windows:** Choose 3 men at 4 hours each (One man has already been scheduled for this)
- **Installation of 2 new doors:** Choose 2 men at 2 hours each
- **Painting of 3 windows:** Choose 2 men at 3 hours each
- **Painting of 2 new doors:** Choose 2 men at 3 hours each

\*\* The windows and doors need to be installed before they are painted.\*\*

**Schedule of Availability for D & S Construction**

John 8:00 a.m. – 4:00 p.m.  
Tom 10:00 a.m.– 5:00 p.m.  
Cecile 8:00 a.m.– 3:00 p.m.  
Eric 7:00 a.m.– 3:00 p.m.  
Scott 12:00 p.m.– 6:00 p.m.

Start Time	<b>INSTALL WINDOWS</b>	<b>INSTALL DOORS</b>	<b>PAINT WINDOWS</b>	<b>PAINT DOORS</b>
JOHN	8:00 - 12:00			
TOM				
CECILE				
ERIC				
SCOTT				

**TOTAL NUMBER OF HOURS TO BE PAID**

JOHN	
TOM	
CECILE	
ERIC	
SCOTT	
GRAND TOTAL OF HOURS	

## COMPUTER ACTIVITIES

Time Allotted:  
45 - 60 minutes

Our first computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 6**.
- Click on **Workplace Schedules**.
- Complete the Activity.

The next website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org)

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life**.
- Scroll down to **Count Pills** and click on it.
- Start Activity by clicking on **Start Activity**.
- Drag the pills across to the tray.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **1441- Administration Clerks** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy , check **Scheduling & Budgeting– Level 1**.
- Click on **Next**.
- Choose 1441 – **Administration Clerks – Supply Order Form**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the Numeracy - **Scheduling & Budgeting – Level 2.**
- Click on **Next.**
- Choose **6641 – Kitchen Helpers & Line Cooks – Fast Food Counter Attendant.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course **“INDEPENDENT STUDY”**.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS EIGHT**

Take a look at next week. What type of scheduling to do you have to complete? Some examples may be: a doctor's appointment, a child's soccer game, or checking the bus schedule to figure out what bus number to take to arrive at school on time.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

### Exercise

- 1)  $45 + 30 = 75$  minutes or 1 hour and 15 minutes
- 2)  $60 \times 3 = 180$  minutes
- 3)  $24 \times 2 = 48$  hours
- 4)  $72 \div 24 = 3$  days

### Timesheet for Jack Jones

- 1) 5 hours 30 minutes
- 2)  $9:30 - 12:00 = 2 \frac{1}{2}$  hours  
 $12:00 - 3:30 = \underline{3 \frac{1}{2}} \text{ hours}$   
Total            6 hours
- 3) Wednesday – 6 hours  
Thursday –  $8 \frac{1}{2}$  hours  
Friday – 3 hours
- 4)  $7 \frac{1}{2}$  hours
- 5) 

30 minutes	$30/60$ or $3/6$ or $\frac{1}{2}$	.5
15 minutes	$15/60$ or $3/12$ or $\frac{1}{4}$	.25
45 minutes	$45/60$ or $9/12$ or $\frac{3}{4}$	.75

## ANSWER KEY FOR THE PRACTITIONER

### WORKPLACE ACTIVITY (15)

Start Time		TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00		Mickey - T	Misty - B/B		Connor - B
10:30			Misty - B/B	Candy - B/B	Connor - B
11:00			Misty - B/B	Candy - B/B	
11:30			Misty - B/B	Candy - B/B	
12:00					
12:30		<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>
1:00			Shania - B	Charles - B/B	Cooper - B
1:30			Shania - B	Charles - B/B	Cooper - B
2:00		Katie - B/B	Shania - B	Charles - B/B	
2:30		Katie - B/B			
3:00		Katie - B/B			
3:30		Katie - B/B			
4:00		Katie - B/B			

### WORKPLACE ACTIVITY (16)

#### Schedule

\*\*This schedule is not the only solution to this exercise\*\*

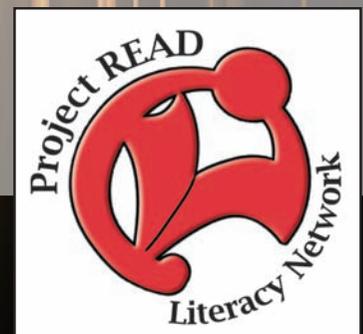
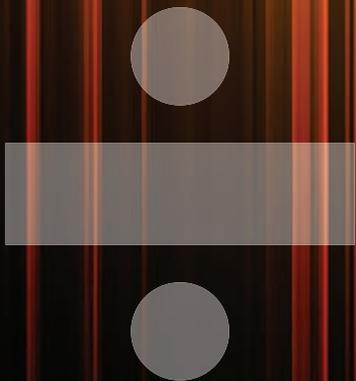
Start Time	<b>INSTALL WINDOWS</b>	<b>INSTALL DOORS</b>	<b>PAINT WINDOWS</b>	<b>PAINT DOORS</b>
JOHN	8:00 - 12:00		12:00 - 3:00	
TOM		12:00 - 2:00		2:00 - 5:00
CECILE	8:00 - 12:00		12:00 - 3:00	
ERIC	8:00 - 12:00			
SCOTT		12:00 - 2:00		2:00 - 5:00

**TOTAL NUMBER OF HOURS TO BE PAID**

JOHN	7
TOM	5
CECILE	7
ERIC	4
SCOTT	5
GRAND TOTAL OF HOURS	28

# CLASS NINE

## Making Calculations Using Rates



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Calculating Distance, Rate & Time
Materials Required:	Copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	20 - 30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in determining distance, rate and time. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise question 1. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li></ol>

## **CLASS NUMBER 9**

Have you ever wondered what type of everyday activity involves calculations involving rates? When we are mailing a package, the postal clerk will weigh the package to determine the rate (or cost) of postage. What about a phone bill, or an electric bill? We are charged according to the provincial rates.

What about the age old problem of “Are we there yet”? Yes, those few words that children chant in our cars when we are travelling somewhere!!

### **EVERYDAY LIFE ACTIVITY (1)**

Let’s calculate distance, rate and time. You can figure out how far you have gone (distance) if you know how fast you are travelling (rate) and how long it will take you to get from one point to another (time).

We are going on a road trip to the Fun and Sun capital of Ontario – Sunspree, Ontario.

**\*\*Remember from last class where we changed minutes to decimals?\*\*\***

15 minutes = .25 hour

30 minutes = .5 hour

45 minutes = .75 hour

## Exercise

- 1) How long will it take to drive 300 kilometres if you travel 60 kilometres per hour?  
To calculate time, you take the distance and divide it by rate.

$$\text{Time (T)} = \text{distance (D)} \div \text{rate (R)}$$

Step 1: We know the distance is 300 kilometres and the rate is 60 kph

$$300 \div 60 = 5$$

Step 2: Your time is 5 hours. In other words, it will take you 5 hours to travel 300 kilometres at 60 kilometres per hour.

- 2) The speed limit on the Trans Canada Highway is 50 kilometres per hour. How far can you travel at this rate in 3 hours and 30 minutes?

To calculate distance, you multiply the rate times the time

$$\text{Distance (D)} = \text{rate (R)} \times \text{time (T)}$$

Step 1:  $D = 50 \times 3.5$

Step 2:  $D = 175$  kilometres. In other words, you will travel 175 kilometres in 3 hours and 30 minutes at 50 kilometres per hour.

- 3) Susan makes the trip to her cottage in 1 hour and 15 minutes. She travels 75 kilometres. What is the usual rate of speed for this trip?

To calculate rate, you take the distance and divide it by time

$$\text{Rate (R)} = \text{Distance (D)} \div \text{Time (T)}$$

Step 1:  $R = 75 \div 1.25$

Step 2:  $R = 60$ . In other words, Susan travels at a rate of speed equal to 60 kilometres per hour.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Converting Measurements between Imperial and Metric.
Materials Required:	Copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in converting between measurements. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete the Exercise questions 1 - 4. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>3. Read about the occupations that make calculations using rates.</li></ol>

## EVERYDAY LIFE ACTIVITY (2)

### Exercise 2

In this exercise, we are going to compare the imperial form of measurement (inches, yards, miles) to the metric form of measurement (centimetre, meter, kilometre).

1 inch = 2.54 centimetres

36 inches = 1 yard

39.37 inches = 1 metre

1 mile = 1.61 kilometre

1) If you were going to walk one mile, how many kilometres would you walk?

---

2) How many inches are in a metre?

---

3) How many centimetres are in 3 inches?

---

4) Is a yard or a metre larger?

---

There are several occupations that encourage workers to make calculations using rates. This type of calculation is called Measurement and Calculation. Here are a few of the occupations using rates:

- Truck Drivers (NOC 7411) – calculate the amount of pay due by multiplying mileage by the pay rate
- Bus Drivers, Subway Operators and other Transit Operators (NOC 7412) – count the passengers and pieces of luggage to ensure the total is correct
- General Office Clerks (NOC 1411) – weigh mail to determine the cost of postage
- Receptionists & Switchboard Operators (NOC 1414) – weigh mail to determine the cost of postage
- Administrative Clerks (NOC 1441) – weigh outgoing mail and based on weight, choose appropriate courier
- Shippers & Receivers (NOC 1471) – calculates a shipping price using a rate chart

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
17	1 Measurement & Calculation - measuring out quantities	3 - multiplies whole numbers and decimals	General Office Clerks (NOC 1411)

Materials Required:	Copy of Workplace Activity 17 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 17 by reading the introduction.</li><li>2. Have the students determine the cost of shipping and complete the table.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (17)

Document: 17  
Essential Skill Level: 1  
Skill: Measurement  
& Calculation  
- measuring out  
quantities  
LBS Level: 3  
- multiplies whole  
numbers and decimals

You are working for the postal outlet in your local Mini Mart. A customer brings several letters to you to determine the amount of postage they require.

0 - 30 grams	.57
30 - 50 grams	1.00

Step 1: Determine what the cost of postage will be for the weight of the letter

Step 2: Multiply the quantity of letters by the cost for that weight.

Step 3: To calculate the total, add up all the costs.

The first one is done for you:

Quantity	Weight	Cost
5	27 grams	$5 \times .7 = \$2.85$
2	38 grams	
4	10 grams	
3	40 grams	
1	15 grams	
	<b>TOTAL</b>	

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
17	1 Measurement & Calculation - calculates rates	3 - multiplies whole numbers and decimals	Truck Drivers (NOC 7411)

Materials Required:	Copy of Workplace Activity 18 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 18 by reading the introduction.</li><li>2. Have the students complete the mileage chart.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (18)

Document: 18  
Essential Skill Level: 2  
Skill: Measurement &  
Calculation  
- calculates rates  
LBS Level: 3  
- multiplies whole  
numbers and decimals

Today, you are “on the road again” with Premium Trucking Company. You are required to fill in a driver’s log to calculate your pay rate.

You are reimbursed as follows:

First 500 kilometres	.40 per km
Next 300 kilometres	.38 per km
Remaining kilometres	.35 per km

Step 1: Add the mileage column to obtain the total mileage

Step 2: Multiply the First 500 km by the rate of pay to obtain the total pay

Step 3: Multiply the next 300 km by the rate of pay and do the same for the remaining km.

Step 4: Add the amounts of Total Pay together to obtain the Grand Total

<b>DATE</b>	<b>MILEAGE</b>	<b>RATE OF PAY</b>	<b>TOTAL PAY</b>
March 14, 2010	333 km.	XXXXXX	XXXXXX
March 15, 2010	175 km	XXXXXX	XXXXXX
March 16, 2010	150 km	XXXXXX	XXXXXX
March 17, 2010	145 km	XXXXXX	XXXXXX
March 18, 2010	160 km	XXXXXX	XXXXXX
<b>TOTAL MILEAGE</b>		XXXXXX	XXXXXX
<b>FIRST 500 KM</b>		.40	
<b>NEXT 300 KM</b>			
<b>REMAINING MILEAGE</b>			
		<b>GRAND TOTAL</b>	

## **ADDITIONAL ACTIVITY FOR WORKPLACE 18**

We have calculated the total to be paid using the Canadian metric mileage of kilometres. Suppose you were a truck driver in the United States, and required to convert the kilometres to miles. The conversion rate is 1.6 kilometres equals 1 mile. How many miles would you travel for this trip? \_\_\_\_\_

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## COMPUTER ACTIVITY

Time Allotted:  
45 - 60 minutes

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org select **Math**.
- Select **Decimals and Percents**.
- Click on **Decimals Made Easy**.
- Start Activity by clicking on **Next**.
- Continue to click on **Next** until you have answered all ten questions.

The next website is [www.funbrain.com](http://www.funbrain.com)

- From the Google homepage type **funbrain**
- Click on **Funbrain.com** – The Internet’s #1 Education Site.
- Select **All Games** (located in the upper right hand corner of the screen).
- Under the **Numbers** heading, click on **Power Football**.
- Select add, subtract, multiply or divide. I suggest trying all together.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **1471 – Shipper/Receiver** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Measurement & Calculation – Level 1**.
- Click on **Next**.
- Choose **1471 – Shipper/Receiver Packing List**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the Numeracy - **Measurement & Calculation – Level 2**.
- Click on **Next**.
- Choose **8432 – Nursery & Greenhouse Workers Product Guide**.
- Check out a Real Workplace Activity set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

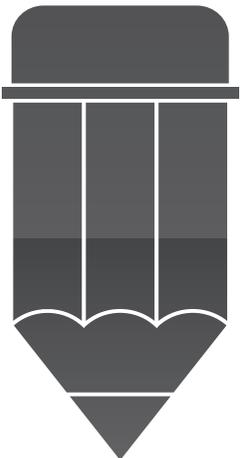
Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK PAGE FOR CLASS NINE**

Let's think about job prospects for the future. Please pick one of the jobs that have been mentioned in a previous lesson and explore it using the Ontario Skills Passport website for profiles on different occupations.

Please bring in a favourite recipe for tomorrow's class. We will be calculating different quantities for more or less servings.



## ANSWER KEY FOR THE PRACTITIONER

### EVERYDAY LIFE ACTIVITY EXERCISE

- 1) 5 hours
- 2) 175 kilometres
- 3)  $R = 75 \div 1.25$   
 $R = 60$  km per hour

### EXERCISE (2)

- 1) 1.61 kilometre
- 2) 39.37 inches
- 3)  $2.54 \times 3 = 7.62$
- 4) Metre

### WORKPLACE ACTIVITY (17)

5	27 grams	\$2.85
2	38 grams	2.00
4	10 grams	2.28
3	40 grams	3.00
1	15 grams	<u>.57</u>
	TOTAL	\$10.70

### WORKPLACE ACTIVITY (18)

Total Mileage = 963 km		
First 500 km @ .40 =		\$200.00
Next 300 km @ .38 =		114.00
Remaining km (163) @ .35 =	57.05	
TOTAL PAID		\$371.05

### ADDITIONAL ACTIVITY

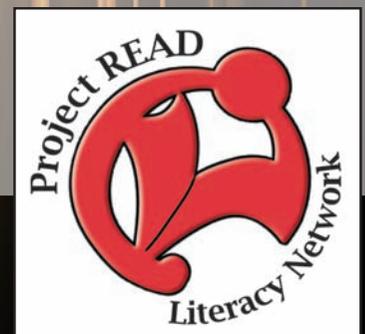
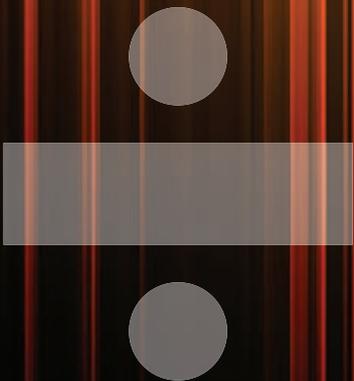
$$\frac{1.6 \text{ kilometres}}{1 \text{ mile}} = \frac{963 \text{ kilometres}}{?}$$

$$963 \times 1 \div 1.6 = 601.875 \text{ or } 601.88 \text{ miles}$$



# CLASS TEN

**Convert or Calculate  
Measurement**



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Converting Height Measurements from Imperial to Metric – inches to centimetres.
Materials Required:	Copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing the topic by reading the introduction to the students.</li><li>2. Introduce the measurement skills found in the first paragraph of the Everyday Life Activity. This can also be shown on a whiteboard or chalkboard for reinforcement.</li><li>3. Have the students complete Exercise questions 1 &amp; 2.</li></ol>

## CLASS NUMBER 10

In this class we are going to convert or calculate measurements. In other words, we are going to look at different types of measurement such as:

- Units of Length
- Units of Weight
- Units of Capacity (liquid measurement)

Every day we have to calculate or convert measurements from one type of measurement to another. Do you remember when your children were growing up? What about that fancy measuring system you had in place (on the door frame)! You could measure your child in inches or centimetres, depending on the type of measuring tape you had on hand.

### EVERYDAY LIFE ACTIVITY

Suzie has just turned two years old. Time to measure her height. She is 34 inches tall already!! How tall is that in centimetres? In order to answer this question, you need to understand the formula for changing inches to centimetres.

There are 2.54 centimetres in 1 inch. \*\*Remember when you change from a large unit to a small unit, you multiply.\*\*

(1) Therefore, the equation would be  $34 \times 2.54 =$  \_\_\_\_\_

Johnny has just turned three years old. It's time to measure his height. He is 90 centimetres tall. What would the formula be to change centimetres to inches?

There are 2.54 centimetres in 1 inch. \*\*Remember when you change from a smaller unit to a larger unit, you divide.\*\*

(2) Therefore, the equation would be  $90 \div 2.54 =$  \_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Converting Weight Measurements from Imperial to Metric – pounds to kilograms.
Materials Required:	Copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing the measurement skills introduced in the first paragraph of the everyday life activity. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 to 4 if they are comfortable with the calculations. If not, work through the exercise questions as a group. This skill can also be shown on a whiteboard or chalkboard.</li></ol>

## EVERYDAY LIFE ACTIVITY (2)

Can you think of any type of calculation you might have to do when grocery shopping? That's right weighing fruits and vegetables.

Peaches are selling for \$1.49 per pound. How much are they in kilograms?

There are 2.2 pounds in 1 kilogram. You are going from a larger unit to a smaller unit, so you will multiply. Therefore, you will multiply  $1.49 \times 2.2 =$  \_\_\_\_\_

Sweet Cherries are selling for \$8.80 per kilogram. How much are they in pounds?

One kilogram equals 2.2 pounds. You are going from a smaller unit to a larger unit, so you will divide. Therefore you will divide  $8.80 \div 2.2 =$  \_\_\_\_\_

### Exercise

1) Granny Smith Apples are selling for \$.79 per pound. What is the cost of one kilogram of apples?

---

2) Strawberries are selling for \$2.20 per kilogram. What is the cost of one pound of cherries?

---

3) Tomatoes are selling for \$.99 per pound. What is the cost of one kilogram of tomatoes?

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4) Whole white mushrooms are sold in grams. How many grams are in a kilogram? That's right –1,000 grams in 1 kilogram. The mushrooms are \$1.00 for 227 grams. How much would one kilogram of mushrooms cost?

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**\*\*When you divide a number by 1,000, you move the decimal point to the left three places.\*\***

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 3</b>
Purpose:	Converting Liquid Measurements from Metric to Imperial – Litres to Gallons.
Materials Required:	Copy of Everyday Life Activity 3 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing the measurement skills outlined in the first paragraph of the everyday life activity. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 to 3 if they are comfortable with the calculations. If not, work through the exercise questions as a group. This skill can also be shown on a whiteboard or chalkboard.</li><li>3. Read about the occupations that use the convert or calculate measurement skill.</li></ol>

## EVERYDAY LIFE ACTIVITY (3)

Suppose you are taking a road trip to the United States. They sell their gasoline in imperial gallons. We sell our gasoline in litres. How do litres and gallons relate?

One litre = .22 imperial gallons

If you purchased 25 litres of gasoline at your local gas station, how many gallons would you be purchasing?

**\*\*You are calculating a large unit to a smaller unit, therefore you multiply.\*\***

$25 \times .22 = 5.5$  imperial gallons

### **Exercise**

- 1) Charlie wanted to purchase 100 litres of gasoline for his boat. How many imperial gallons did he purchase?

---

- 2) Charlie's friend Joe wanted to purchase 50 litres of gasoline for his boat. How many imperial gallons did he purchase?

---

- 3) How does the answer to question 2 relate to the answer to question 1?

---

Many occupations require workers to convert or calculate measurements.

Following is a list of those occupations:

- Letter Carriers (NOC 1462) – convert weight in kilograms to pounds
- Couriers, Messengers & Door to Door Distributors (NOC 1463) – use scales on maps to measure distance from one delivery destination to another
- Dental Assistants (NOC 3411) – mix compounds for dental procedures using pre-measured ingredients
- Nurse Aides, Orderlies & Patient Service Associates (NOC 3413) – measure patient’s temperature, respiration, weight and height, liquid input and output, vital signs, and blood pressure
- Early Childhood Educator Assistants (NOC 4214) – measure and record quantities of formula or medication to be given to children
- Bartenders (NOC 6452) and Food & Beverage Servers (NOC 6453) – use jiggers to measure liquor in ounces
- Kitchen Helpers & Line Cooks (NOC 6641) – measure quantities of ingredients for recipes, doubling or halving
- Visiting Homemakers, Housekeepers & Related Occupations (NOC 6471) – measure specified amount of medication
- Cashiers (NOC 6611) – weigh produce and convert between kilograms and pounds for customers
- Grocery Clerks & Store Shelf Stockers (NOC 6622) weigh fruit and vegetables for customers
- Construction Trades Helpers & Labourers (NOC 7611) – calculate area or perimeter of work site to determine how much material is needed and calculate the volume for cement pours

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
19	2 Measurement & Calculation - converts quantities by doubling, halving	3 - multiplies whole numbers & basic fractions to double or half a recipe	Bartenders (NOC 6452)

Materials Required:	Copy of Workplace Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 19 by reading the introduction.</li><li>2. Show the calculation for multiplying and dividing fractions before introducing the activity. Have the students complete the conversions for the drinks.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (19)

Today, you are a bartender at Jim's Bar. You are mixing some fancy drinks for the local patrons. Listed below are some classic cocktail recipes. The recipes are given for one person. Please calculate the ingredients for 12 people.

### Brandy Alexander

### Amount for 12 People

2 oz. Brandy

\_\_\_\_\_

½ oz. Dark Crème de Cacao

\_\_\_\_\_

1 oz. Heavy Cream

\_\_\_\_\_

### Champagne Buck

### Amount for 12 People

2 ½ oz. Champagne

\_\_\_\_\_

1 ½ oz. Gin

\_\_\_\_\_

2 dashes of Cherry Brandy

\_\_\_\_\_

1 tsp. Orange juice

\_\_\_\_\_

### Broadway Special

### Amount for 12 People

2 oz. Gin

\_\_\_\_\_

1 ½ oz. Sweet Vermouth

\_\_\_\_\_

1 tsp. Pineapple juice

\_\_\_\_\_

2 dashes of Grenadine

\_\_\_\_\_

½ egg white

\_\_\_\_\_

Document:19

Essential Skill Level: 2

Skill: Measurement &  
Calculation

- converts quantities by  
doubling and halving

LBS Level: 3

- multiplies whole  
numbers and basic  
fractions to double or  
half a recipe

The following recipes are for 10 people. Please calculate the amounts for 5 people.

Blue Hawaiian

Amount for 5 People

15 oz. White Rum

\_\_\_\_\_

10 oz. Blue Curacao

\_\_\_\_\_

9 oz. Pineapple juice

\_\_\_\_\_

10 tsp. Coconut cream

\_\_\_\_\_

7 oz. Heavy cream

\_\_\_\_\_

Tequila Sunrise

Amount for 5 People

18 oz. Tequila

\_\_\_\_\_

35 oz. fresh Orange Juice

\_\_\_\_\_

10 oz. Grenadine

\_\_\_\_\_

8 slices of orange

\_\_\_\_\_

10 Maraschino Cherries

\_\_\_\_\_

Long Island Iced Tea

Amount for 5 People

7 1/2 oz. Vodka

\_\_\_\_\_

8 oz. Gin

\_\_\_\_\_

9 1/2 oz. Tequila

\_\_\_\_\_

12 1/2 oz. Light Rum

\_\_\_\_\_

32 oz. Chilled Cola

\_\_\_\_\_

10 oz. Lime Juice

\_\_\_\_\_

5 oz. Cointreau

\_\_\_\_\_

5 tsp. Sugar syrup

\_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
20	2 Measurement & Calculation - calculating area	3 - calculates area of a square	Construction Trades Helpers & Labourers (NOC 7611)

Materials Required:	Copy of Workplace Activity 20 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 20 by reading the introduction.</li><li>2. Refresh the skill of calculating area.</li><li>3. Have the students complete the Exercise questions 1 – 5.</li><li>4. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (20)

Document: 20  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- calculating area  
LBS Level: 3  
- calculates area of square

You are working at a new mall that is being built in your neighbourhood! Construction workers and trades people calculate and convert measurements to see how much material is needed to complete the project.

1) One of the stores measures 20 feet wide and 20 feet long. What is the area of this store?

---

2) The store in the first question requires some type of flooring. You have chosen to install ceramic tile. Since the area in the first question is \_\_\_\_\_ and the tiles measure 1 foot x 1 foot, how many tiles would you need to order?

---

---

3) The tiles in the question 2 are sold in boxes of 10 tiles per box. How many boxes would you order?

---

---

4) Another store requires some paint. The square footage of the ceiling measures 500 square feet. Each can of paint covers 350 square feet of surface. How many cans of paint would you need to order for one coat of paint?

---

---

5) This store has chosen a colour of paint that requires two coats of paint. If the square footage of a wall measures 400 square feet, how many cans of paint would you order for this store? Each can of paint covers 250 square feet.

---

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

- 1) From the Google homepage, type **alpharoute**
  - Select **Alpharoute - Home 199.71.28.160/**
  - Click on **Do Activities**
  - Click on **Employment Area**
  - Click on **Math at Work – Measurement**
  - To complete activities for measurement, click on the button to the right of the screen – choose **Imperial Quiz 1 – 5 and Metric Quiz 1-5**
  
- 2) The next activity is found on the **Measure Up** website.
  - From the google homepage, type **measureup**.
  - Choose **How do your skills Measure Up?**
  - Select **English**.
  - On the left hand side of the page under Choice of Activities, click on **Explore Careers**.
  - Under Select A Category, highlight **All Occupations**.
  - Select **Bartenders – 6452**.
  - Click on **Try Some Activities Typical of this Occupation**.
  - Click on **Try Another Activity Related To Same Occupation** until you see the activity called **Recipe Problem**.
  - Click on **#1 – Open and Print Questions**.
  
- 3) The next website is [www.funbrain.com](http://www.funbrain.com)
  - From the Google homepage type **funbrain**.
  - Select **All Games** (located in the upper right hand corner of the screen).
  - Under the **Numbers** heading, click on **Soccer Shoot Out**.
  - Select Easy multiplication.
  - Select Medium multiplication.
  - Select Hard multiplication and division.
  
- 4) The next website is [www.onlinemathlearning.com](http://www.onlinemathlearning.com)
  - From the Google homepage, type **onlinemathlearning.com**
  - Select **Math Games** on sidebar.
  - Find **Measurement Games**.
  - Select **Mostly Postie**.
  - Play the Game.

- 5) The next computer activity is found on the Ontario Skills Passport website.
- From the Google homepage, enter **Ontario Skills Passport**.
  - Choose Ontario Skills Passport - skills.edu.gov.on.ca
  - Choose **Occupations and Tasks**.
  - Check **Sorted by NOC**.
  - Click on **Next**.
  - Find **3414 – Other Assisting Occupations in Support of Health Services** – click on the check mark.
  - Scroll down the page to **Essential Skills – Related Assessment Tools**.
  - Click on **OSP Check Up Tools**.
  - Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
  - Check off **second box** – check out one Essential Skill to practice.
  - Click on **Next**.
  - Under the heading Numeracy, check **Measurement & Calculation – Level 1**.
  - Click on **Next**.
  - Choose **3414 – Other Assisting Occupations in Support of Health Services – Preparing Medicines**.
  - Check out a Real Workplace Activity Set.
  - Select **On-line version** and click on continue.
  - Finish Now.
  - Enter your information.
  - Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the **Numeracy-Measurement & Calculation – Level 2**.
- Click on **Next**.
- Choose **3413 – Nurse Aides, Orderlies & Patient Services – ADL Sheet**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## PRACTITIONER PAGE

### HOMEWORK FOR CLASS TEN

Last class, the students were asked to bring in a recipe from home. Take a look at some of the recipes and have half of the class convert to a larger amount (for example 8 servings) and the other half convert to a smaller amount (for example 2 servings).

For homework tonight, ask the students if they have access to a computer. If so, they may want to take a look at the activities found on The Learning Hub. Many of these activities will be a review of the calculations they completed today.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

$$34 \times 2.54 = 86.36 \text{ cm}$$

$$90 \div 2.54 = 35.43 \text{ inches}$$

## EVERYDAY LIFE ACTIVITY (2)

$$1.49 \times 2.2 = 3.278 \text{ OR } \$3.28$$

$$8.80 \div 2.2 = \$4.00$$

### Exercise

- 1) \$1.74
- 2) \$2.20
- 3) \$2.18
- 4) \$.227 or \$.23

## EVERYDAY LIFE ACTIVITY (3)

### Exercise

- 1)  $.22 \times 100 = 22$  imperial gallons
- 2)  $.22 \times 50 = 11$  imperial gallons
- 3) One half – 11 is one half of 22  
 $5 \div .22 = 22.727$  or 22.73 litres

## ANSWER KEY FOR THE PRACTITIONER WORKPLACE ACTIVITY (19)

### Brandy Alexander

24 oz. Brandy  
6 oz. Dark Crème de Cacao  
12 oz. Heavy Cream

### Champagne Buck

30 oz. Champagne  
18 oz. Gin  
24 dashes Cherry Brandy  
12 tsp. Orange juice

### Broadway Special

24 oz. Gin  
18 oz. Sweet Vermouth  
12 tsp. Pineapple juice  
24 dashes Grenadine  
6 egg whites

### Blue Hawaiian

7 ½ oz. White Rum  
5 oz. Blue Curacao  
4 ½ oz. Pineapple juice  
5 tsp. Coconut Cream  
3 ½ oz. heavy cream

### Tequila Sunrise

9 oz. Tequila  
17 ½ oz. orange juice  
5 oz. grenadine  
4 orange slices  
5 Maraschino cherries

### Long Island Iced Tea

3  $\frac{3}{4}$  oz. Vodka

4 oz. Gin

4  $\frac{3}{4}$  oz. Tequila

6  $\frac{1}{4}$  oz. Light Rum

16 oz. Cola

5 oz. Lime juice

2  $\frac{1}{2}$  oz. Cointreau

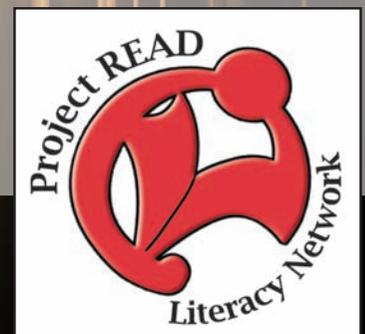
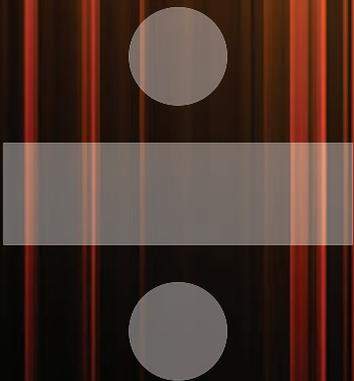
1 tsp Sugar syrup

### **WORKPLACE ACTIVITY (20)**

- 1)  $20 \times 20 = 400$  square feet
- 2) 400 square feet  
400 tiles
- 3)  $400 \div 10 = 40$  You would order 40 boxes of tiles.
- 4) You would require 2 cans of paint.
- 5)  $400 \times 2 = 800$  square feet
- 6)  $800 \div 250 = 3.2$  You would need 4 cans of paint.

# CLASS ELEVEN

## Measurement & Calculation



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 1</b>
Purpose:	Calculating Perimeter
Materials Required:	Copy of Everyday Life Activity 1 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the calculations involved in calculating perimeter. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 &amp; 2 of Everyday Life Activity 1.</li></ol>

## CLASS NUMBER 11

Have you ever had to install baseboards in a room? What type of calculations did you have to complete before you purchased the wood?

### EVERYDAY LIFE ACTIVITY (1)

To determine the perimeter of a room, you need to use the following formula:

$$P = 2 \times L + 2 \times W$$

Suppose the room's length was 10 feet and the room's width was 10 feet. What would the perimeter of the room be?

$$P = 2 \times 10 + 2 \times 10$$

$$P = 20 + 20$$

$$P = 40 \text{ feet}$$

### Exercise

- 1) George is installing baseboards in his new rec room. The room measures 15 feet in length and 12 feet in width. What is the perimeter of this room?  
\_\_\_\_\_
- 2) The boards are sold in 8 foot lengths. How many boards would George need to purchase?  
\_\_\_\_\_
- 3) George is also purchasing trim for a window. The window measures 4 feet wide and 5 feet in length. What is the perimeter of the window?  
\_\_\_\_\_
- 4) The trim boards are sold in 6 foot lengths. How many boards would George need to purchase?  
\_\_\_\_\_

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity 2</b>
Purpose:	Understanding Capacity
Materials Required:	Copy of Everyday Life Activity 2 to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reading about the difference between a millilitre and a litre.</li><li>2. Have the students complete the exercise questions 1-10.</li><li>3. Complete this exercise by informing the students about the various occupations that use this skill.</li></ol>

## EVERYDAY LIFE ACTIVITY (2)

How do millilitres and litres relate? There are 1,000 millilitres in 1 litre.

For example, perfume is sold and measured in millilitres. Gasoline is sold and measured in litres.

- Let's complete an exercise to understand the relationship between millilitres and litres.
- For the next ten questions, write on the line whether the item is sold in **millilitres or litres**.
- I have completed the first answer for you.

1. Perfume is sold in millilitres.
2. Cans of paint are sold in \_\_\_\_\_.
3. Shampoo in a bottle is sold in \_\_\_\_\_.
4. Water in a bucket is measured in \_\_\_\_\_.
5. Measuring liquid amounts for a recipe would be measured in \_\_\_\_\_.
6. Gasoline is sold and measured in \_\_\_\_\_.
7. The water you would use to wash a car would be measured in \_\_\_\_\_.
8. Cleaning fluids are measured in \_\_\_\_\_ for diluting and adding to water.
9. A typical water glass is measured in \_\_\_\_\_.
10. The amount of water used to fill a pool would be measured in \_\_\_\_\_.

Adapted from Math Skills for the Workforce.

Many trades people such as construction workers use measurement and calculation to determine the amount of supplies to purchase in order to complete their job. Here is an example of one:

- Customer Service, Information and Related Clerks (NOC 1453) – calculate a package’s volume given its size when arranging to ship it by air
- Couriers, Messengers and Door-to-Door Distributors (NOC 1463) – calculate the area and volume of a parcel to inform a carrier how much space it will take
- Shippers and Receivers (NOC 1471) – check the volumes of fuel, oil pressure, temperature and amperage of delivery vehicles to make sure they are within acceptable operating levels
- Construction Trades Helpers & Labourers (NOC 7611) – calculate area or perimeter of work site to determine how much material is needed and calculate the volume for cement pours
- Janitors, Caretakers and Building Superintendents (NOC 6663) – calculate the correct volume of cleaning fluid which needs to be added to a bucket of water
- Other Trades Helpers & Labourers (NOC 7612) – measure length, height and angles to lay flooring, to erect walls and baseboards and to install drywall

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
21	<p style="text-align: center;">1</p> Numerical Estimation - estimates the correct volume of cleaning fluid which needs to be added to a bucket of water  <p style="text-align: center;">2</p> Measurement & Calculation - calculates capacity	4	- solves simple problems involving ratios  Janitors, Caretakers & Building Superintendents (NOC 6)

Materials Required:	Copy of Workplace Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 21 by reading the introduction.</li> <li>2. Have the students complete questions 1 - 5. Depending on the skill level of the students, you might want to treat this as a group activity.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (21)

Document: 21  
Essential Skill Level: 1  
Skill: Numerical Estimation  
- estimates the correct volume of cleaning fluid  
Essential Skill Level: 2  
Skill: Measurement Calculation  
- calculates capacity  
LBS Level: 4  
- solves simple problems involving ratios

Today you are a caretaker at Queen's Public School. It is 4:00 p.m. and the school has cleared out for another school day. It is time to clean the floors, wax the floors, sanitize the desktops, and wipe off the whiteboards. Let's get to work!!!!

### Exercise

1. The bucket for cleaning the floors has a capacity of 10 litres. The cleaning concentrate is mixed according to 200 millilitres per 1 litre of water. How much cleaning fluid do you need to add to 8 litres of water?  

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---
2. The floors are now dry. It is time to shine them up with some floor wax. The room is 6 metres long by 6 metres wide. First, we need to calculate the square metres of the room. **\*\*Area = L × W\*\*** You will need 100 millilitres of wax per square metre. How much wax will you need to complete one classroom?  

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---

---
3. There are 20 classrooms to wax. How much wax will you need for all the classrooms?  

---
4. The desks will be cleaned using all purpose cleaner. On the bottle, it says to mix 125 millilitres of all purpose cleaner for 5 litres of water. How much cleaning fluid would you need for 20 litres of water?  

---

---
5. The whiteboards are looking pretty dirty after all of those lessons! The whiteboard cleaner needs to be diluted with water. For every 2 litres of water, add 100 millilitres of whiteboard cleaner. How much whiteboard cleaner do you need for 1 litre of water?  

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## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
22	2 Measurement & Calculation - calculates volume of simple shapes	3 - measures volume	Other Trades Helpers & Labourers (NOC 7612)

Materials Required:	Copy of Workplace Activity 22 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 22 by reading the introduction. Illustrate the calculation of volume on a whiteboard or chalkboard.</li> <li>2. Have the students complete questions 1 &amp; 2. Depending on the skill level of the students, you might want to treat this as a group exercise.</li> <li>3. Have the students complete the table measuring volume of the park benches.</li> <li>4. Verbally, take up the exercise with the students.</li> </ol>

## WORKPLACE ACTIVITY (22)

Document: 22  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- calculates volume of  
simple shapes  
LBS Level: 3  
- measures volume

Today you are working on a job site for J & J Construction Company. You are the operator of a cement truck and need to calculate how much cement you need to purchase to fill the forms for the cement benches located in the local park.

In order to calculate the volume of an object you use the formula:

$$V = LWH \text{ (Volume = Length x Width x Height)}$$

\*\*The answer is always shown in cubic units\*\*

- 1) You are going to pour cement into a rectangular form to make cement benches. First you need to find out the volume of the rectangular bench. The bench will measure 6 feet in length, 2 feet in width and be 2 feet high. What would you calculate for this problem?

\*Hint:  $V = LWH$

---

---

- 2) One cement bag covers 20 cubic feet. How many bags of cement do you need to purchase to make the bench in question 1?

---

---

3) Below is a table that gives the length, width and height of the forms for the benches to be filled with cement. Calculate the volume for the next five benches.

<b>Length</b>	<b>Width</b>	<b>Height</b>	<b>Volume</b>
8 feet	2 feet	3 feet	
5 feet	3 feet	3 feet	
6 feet	2 feet	3 feet	
4 feet	2 feet	4 feet	
5 feet	2 feet	4 feet	
		<b>GRAND TOTAL</b>	

4) How many bags of cement do you need to purchase if one bag covers 20 cubic feet?

---

---

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

- 1) From the Google homepage, type [www.alpharoute](http://www.alpharoute.com)
- 2) Choose **AlphaRoute – Home** 199.71.28.160/
- 3) Click on **Do Activities**.
- 4) Click on **Employment Area**.
- 5) Click on **Math at Work**.
- 6) Click on **Calculating Area**.
- 7) Complete **Activity 1 – 5**.

The next computer activity is found on the **Ontario Skills Passport website**.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose **Ontario Skills Passport - skills.edu.gov.on.ca**
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **8421- Chainsaw & Skidder Operators** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Data Analysis – Level 1**.
- Click on **Next**.
- Choose **8421-Chainsaw & Skidder Operators – Log Lengths**.
- Check out a Real Workplace Activity set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

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- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS ELEVEN**

When you go home tonight, please find as many items as you can that are sold in millilitres and litres. Bring the list to class tomorrow.



## ANSWER KEY FOR THE PRACTITIONER

### EVERYDAY LIFE ACTIVITY

#### Exercise

1)  $P = 2L + 2W$

$P = 2(15) + 2(12)$

$P = 30 + 24$

$P = 54$  feet

2)  $54 \div 8 = 6.75$  Would need 7 boards

3)  $2(4) + 2(5) = 8 + 10 = 18$  feet

4)  $18 \div 6 = 3$  boards

### EVERYDAY LIFE ACTIVITY (2)

#### Exercise

1. Millilitres
2. Litres
3. Millilitres
4. Litres
5. Millilitres
6. Litres
7. Litres
8. Millilitres
9. Millilitres
10. Litres

## ANSWER KEY FOR THE PRACTITIONER

### WORKPLACE ACTIVITY (21)

- 1) 1,600 ml. Or 1.6 litres
- 2)  $6 \times 6 = 36$  square metres  
3,600 ml. Or 3.6 litres
- 3)  $3,600 \times 20 = 72,000$  ml. of wax or 72 litres
- 4) 500 ml. of all purpose cleaner
- 5) 50 ml. of whiteboard cleaner

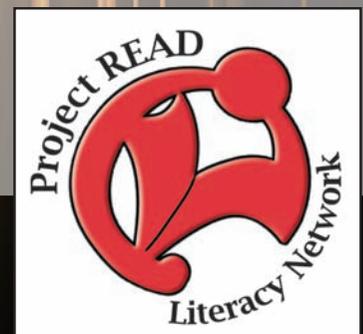
### WORKPLACE ACTIVITY (22)

- 1)  $V = lwh$   
 $V = 6 \times 2 \times 2$   
 $V = 24$  cubic feet
- 2) 2 bags of cement
- 3)  $8 \times 2 \times 3 = 48$  cubic feet  
 $5 \times 3 \times 3 = 45$  cubic feet  
 $6 \times 2 \times 3 = 36$  cubic feet  
 $4 \times 2 \times 4 = 32$  cubic feet  
 $5 \times 2 \times 4 = 40$  cubic feet  
GRAND TOTAL = 201 cubic feet  
 $201 \div 20 = 10.05$

You would need 11 bags of cement to complete the project.

# CLASS TWELVE

## Numerical Estimation



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Numerical Estimation
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing the concept of numerical estimation. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 - 3 of Everyday Life Activity.</li><li>3. Verbally, take up the answers with the students.</li><li>4. Read about the different occupations that use this skill in the workforce.</li></ol>

## CLASS NUMBER 12

Today, we are going to look at numerical estimation.

### EVERYDAY LIFE ACTIVITY

Have you ever ordered a pizza or had to estimate how many slices or what size to order? For instance, how many slices are in a 12" pizza, how about a 10", and so forth?

According to a local pizza shop, here are the breakdowns of the pizzas:

Category of Pizza	Size of Pizza	Number of Slices
Small	10 inches	6
Medium	12 inches	8
Large	14 inches	10
X-Large	16 inches	12

## Exercise

1. There are six people in your family including a Mom, a Dad and 4 children aged 2, 4, 9, and 13. Estimate the number of slices you would need to determine the number of pizzas you need to order?

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2. This weekend you are having a birthday party. There will be 10 adults attending. How many pizzas would you order, and in what combination to equal the total number of slices needed?

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3. Your child's class is ordering pizza for a fundraiser. There are 25 children in the class and each child will eat one piece of pizza. What size of pizzas would you order? \*\*When you are estimating, it doesn't matter if you have pizza left over.\*\*

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The skill you are using in your everyday life to determine just how many slices of pizza to order is the same that many occupations use: This skill is known as numerical estimation:

- Shippers and Receivers (NOC 1471) – estimate how much inventory is available to fill an order
- Storekeepers and Parts Clerks (NOC 1472) – estimate the length of time it will take for an out part to be delivered to a repair garage
- Automotive Partspersons (NOC 1472b) – estimate percentages of wear on parts such as tires and brake pads by visual inspection
- Dispatchers and Radio Operators (NOC 1475) – provide an estimated cost for a service based on distance, method of payment and previous experience in sending vehicles to the same general area
- Dental Assistants (NOC 3411) – estimate the amount of time needed for a specific procedure and estimate the amount of compound to mix for a particular procedure
- Nurse Aides, Orderlies and Patient Service Associates (NOC 3413) – estimate how long it will take to dress, bathe or exercise patients, taking into account how much the residents can do, whether they are co-operative and whether the work may be disrupted by a co-worker
- Sales Representatives – Wholesale Trade (non-Technical) (NOC 6411) – estimate by sight the quantity of food product displayed on a grocery store shelf to gauge stock requirements
- Retail Sales Associates (NOC 6421) – estimate the size of an item which is most likely to be right for a customer or estimate the length of time it will take to set up a display
- Hotel Front Desk Clerks (NOC 6435) – estimate how long it will take to get a room ready and estimate the time required for guests to travel from the hotel to the airport, considering weather and traffic conditions
- Maitres d’hôtel and Hosts/Hostesses (NOC 6451) – estimate the eating time of various groups of customers and estimating the number of walk-in clients that the restaurant may get during the serving period. These estimates are used to prepare schedules and seating arrangements and to make seating assignments as customers arrive

- Food and Beverage Servers (NOC 6453) – estimate the time that it will take for a meal to be prepared, based on past knowledge and how busy the restaurant is.
- Visiting Homemakers, Housekeepers and Related Occupations (NOC 6471) – when planning weekly activities, estimate the time it will take to do various chores
- Cashiers (NOC 6611) – estimate prices for customers, such as the price of foods sold by weight or the cost of a meal in a cafeteria
  - estimate whether a show will be sold out by a particular time to inform a customer based on the rate of ticket sales.
- Grocery Clerks and Store Shelf Stockers (NOC 6622) – estimate how many boxes of a product are needed to fill available shelf space
- Security Guards and Related Occupations (NOC 6651) – take measurements of distances between vehicles at an accident scene or make informal estimations
- Light Duty Cleaners (NOC 6661) – estimate the correct volume of cleaning fluid which needs to be added to a bucket of water
- Truck Drivers (NOC 7411) – estimate the size and weight of cartons and skids to determine if they will fit in the trailer and not exceed load limits
- Construction Trades Helpers and Labourers (NOC 7611) – estimate the cost and amount of time needed to complete a job
- Nursery and Greenhouse Workers (NOC 8432) – estimate the ratio of fertilizer to earth when mixing different soils for seedlings and plants
- General Farm Workers (NOC 8431) – estimate the number of hours it will take to collect a prescribed number of chickens

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
23	<p style="text-align: center;">2</p> Numerical Estimation - providing an estimate using a given formula & procedure <p style="text-align: center;">2</p> Measurement & Calculation - converting between measurement systems	<p style="text-align: center;">3</p> - explains mass relationships between appropriate unit (metric)	Esthetician, Electrologists & Related Occupations (NOC 6482)

Materials Required:	Copy of Workplace Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 23 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li> <li>2. Have the students complete the exercise questions 1 – 7.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (23)

In many occupations, you are required to increase or decrease units of measurement by using a proportion or ratio.

Today, you are working as a hair dresser. You are about to colour Gertrude's hair. How do you know the ratio of one colour with another? In order to achieve that perfect "blue" colour –you must apply the following ratios:

1 part black to 3 parts Navy

Let's say you have to use 4 parts of black colour. How many parts of navy would you use?

Step 1: Set up the problem using a type of ratio.

$$\frac{1 \text{ part black}}{3 \text{ parts navy}} = \frac{4 \text{ parts black}}{??}$$

Step 2: You would cross multiply to find out the parts of navy colour to use.  
Therefore,  $3 \times 4 \div 1 = \underline{\hspace{2cm}}$ .

Step 3: You would use 12 parts of navy to achieve the hair colour Gertrude desires.

Document: 23  
Essential Skill Level: 1  
Skill: Numerical  
Estimation

- providing an estimate  
using a given formula &  
procedure

Essential Skill Level: 2  
Skill: Measurement  
& Calculation

- calculating ratio

LBS Level: 3

- explains Mass  
– relationship between  
appropriate unit  
(metric)

## **Exercise**

1) If there are 12 slices in a pizza, how many slices are in 3 pizzas?

$$\frac{12 \text{ slices}}{1 \text{ pizza}} = \frac{???}{3 \text{ pizzas}}$$

Step 1:  $12 \times 3 \div 1 =$  \_\_\_\_\_

**\*\* You always multiply the numbers across from each other and divide the number that is by itself.\*\***

Step 2:  $36 \div 1 = 36$  There are 36 slices in 3 pizzas.

2) There are 10 millimetres in 1 centimetre. How many millimetres in 150 centimetres?

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3) There are 10 centimetres in a decimetre. How many centimetres are in 10 decimetres?

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4) There are 100 centimetres in 1 metre. How many centimetres are in 300 metres?

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5) There are 10 decametres in 1 kilometre. How many decametres are in 15 kilometres?

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Today you are employed as a housekeeper in a large hotel chain. You are required to prepare 20 rooms for occupancy for a large hotel convention that is beginning tomorrow morning.

Each room must have:

- 2 bottles of shampoo
- 1 bottle of conditioner
- 1 bottle of body lotion
- 3 bars of soap
- 6 towels

How many of each must you have on hand to complete 20 rooms?

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- 6) You will take approximately 20 minutes to prepare one room. How much time is required to prepare 20 rooms? Please answer in hours and minutes.

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## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
23	<p style="text-align: center;">2</p> Numerical Estimation - providing an estimate using a given formula & procedure <p style="text-align: center;">2</p> Measurement & Calculation - converting between measurement systems	4	Explains the meaning of ratio used in everyday situations  Kitchen Helpers & Line Cooks (NOC 6641)

Materials Required:	Copy of Workplace Activity 24 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 24 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li> <li>2. Have the students complete the exercise questions 1 – 3.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (24)

Today you are employed by Sharon. She works as a caterer and operates out of her home. You are preparing food for an upcoming party for 16 people. Here is the menu for the evening:

Document: 24  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- converting quantities  
by doubling, etc  
LBS Level: 4  
- explains the meaning  
of ratio used in  
everyday situations

Toasted Garlic Bread ( 2 slices per person)

Barbequed Chicken

Rice

Pasta Salad

Pink Lemonade

## Exercise

- 1) There are six people in your family including a Mom, a Dad and 4 children aged 2, 4, 9, In order to prepare the rice, you need to calculate the amount of rice required to the amount of water required. This is called ratios or comparisons.

The ratio of dry rice to water is 1 cup of rice to 2 cups of water. We would show that ratio like this:

$$\frac{1 \text{ cup rice}}{2 \text{ cups water}} =$$

If this ratio is for 4 servings, how many cups of rice and cups of water would you need for 16 servings? How does 4 relate to 16? That's right  $4 \times 4 = 16$ , therefore to calculate the table, what would you have to do to calculate 16 servings?

<b>Ingredients for 4 Servings</b>	<b>Ingredients for 16 Servings</b>
1 CUP RICE	
2 CUPS WATER	
2 TSP BUTTER	

- 2) We know that 12 ounces or 5 cups of dry pasta equals 8 servings. How many ounces or cups of dry pasta are required for 16 servings?

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- 3) The pink lemonade is made from a frozen concentrate.
- Each can of frozen lemonade concentrate requires 4 cans of water to make 1.7 litres or 60 fluid ounces of lemonade.
  - For a party of 16 people, estimate how many cans of frozen lemonade you need to make for each person to have 12 fluid ounces?

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## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

- 1) Using Google – type in **alpharoute**
- 2) Select **Alpharoute – Home 199.71.28.160**
- 3) Click on **Do Activities.**
- 4) Click on **Employment Area.**
- 5) Click on **Math at Work.**
- 6) Click on **Estimating.**
- 7) Complete Activities.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - skills.edu.gov.on.ca
- Choose **Occupations and Tasks.**
- Check **Sorted by NOC.**
- Click on **Next.**
- Find **7611 - Construction Trades Helpers** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools.**
- Click on **OSP Check Up Tools.**
- Click on **#2 – Facilitated Essential Skills Check-Up Tool.**
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next.**
- Under the heading Numeracy, check **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose **7611 - Construction Trades Helpers – Timesheets.**
- Check out a Real Workplace Activity set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the **Numeracy - Numerical Estimation – Level 1**.
- Click on **Next**.
- Choose **7611 - Construction Trades Helpers – Task Assignment**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

The next computer activity is found on **Mr. Nussbaums's** website.

- From the Google homepage, enter [http://www.mrnussbaum.com/pizza\\_game/index.html](http://www.mrnussbaum.com/pizza_game/index.html) in the address bar
- Scroll down the page to enter your name and click on Play.
- Follow steps 1 to 5.
- Have Fun!

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## PRACTITIONER PAGE

### HOMEWORK FOR CLASS TWELVE

Take up the list the students have prepared from class 11 listing how many items they found in their home with millilitres and litres measurement.

A QUESTION FOR THE STUDENTS|:

When you are adding coffee to your drip coffee maker, how many tablespoons of coffee do you use to make 8 cups of coffee? What would be the ratio of coffee grounds to cups of water?

Bring in a favourite family recipe tomorrow for converting it to metric measurements.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

### **Exercise**

- 1) The answer is an estimate – accept any reasonable answer.
- 2) The answer is an estimate – accept any reasonable answer.
- 3) 1 x-large, 1 large, 1 small  
3 medium, 1 small  
2 large, 1 small

## WORKPLACE ACTIVITY (23)

### **Exercise**

- 1) 36 slices
- 2) 1,500 millimetres
- 3) 100 decimetres
- 4) 3,000 centimetres
- 5) 150 decametres

2 bottles of shampoo =	40 bottles of shampoo
1 conditioner =	20 conditioners
1 body lotion =	20 body lotions
3 bars of soap =	60 bars of soap
6 towels =	120 towels

$20 \text{ rooms} \times 20 \text{ minutes} = 400 \text{ minutes}$

$400 \text{ minutes} \div 60 \text{ minutes} = 6 \text{ hours } 67 \text{ minutes or } 7 \text{ hours } 7 \text{ minutes}$

# ANSWER KEY FOR THE PRACTITIONER

## WORKPLACE ACTIVITY (24)

### **Exercise**

#### 1) Rice

Ingredients for 4 servings

1 cup rice  
2 cups water  
2 tsp. butter

Ingredients for 16 servings

4 cups  
8 cups  
8tsp.

#### 2) Pasta

24 ounces of dry pasta or 10 cups of dry pasta

#### 3) Pink Lemonade

12 ounces x 16 people = 192 ounces

1 can = 60 fluid ounces

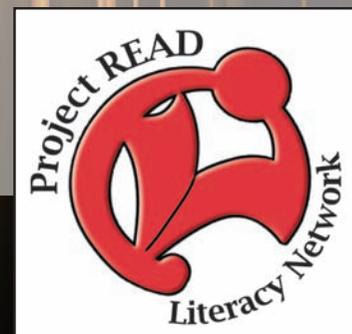
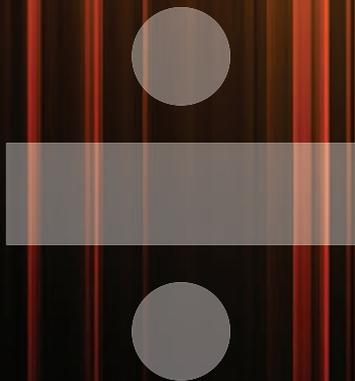
$$\frac{1}{60} = \frac{?}{192}$$

$192 \div 60 = 3.2$  cans or 4 cans



# CLASS THIRTEEN

## Measurement & Calculation



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Calculate Basic Fractions
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	15 - 20 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing calculations for fractions. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 - 4 of Everyday Life Activity.</li><li>3. Verbally, take up the answers with the students.</li><li>4. Read about the different occupations that use this skill in the workforce.</li></ol>

## CLASS NUMBER 13

Have you every followed a recipe for baking and needed to calculate quantities for another amount than the recipe called for? For example, you were following a recipe for a main course that would feed 4 people and you needed to make the dish for 8 people. Exactly how do you do that? Well, let's see....

### EVERY DAY LIFE ACTIVITY

To cook dinner this evening you need  $\frac{1}{3}$  cup of milk for mashed potatoes and another  $\frac{1}{3}$  cup milk for the cheese sauce for the broccoli. How much milk do you need?

$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3} \text{ cups}$$

What if you were adding  $\frac{1}{3}$  cup and  $\frac{1}{4}$  cup? How would you add these fractions together?

Step 1: You need to find a common denominator, which is something that both 3 and 4 go into.

Step 2: The lowest common denominator for 3 and 4 is 12.

Step 3: You need to change  $\frac{1}{3}$  into 12ths and  $\frac{1}{4}$  into 12ths.

$$\frac{1}{3} = \frac{?}{12}$$

Step 4: How does 3 relate to 12? That's right.... $3 \times 4 = 12$ . Remember, whatever you do to the bottom number, you do to the top number. So,  $1 \times 4 = 4$ . The top number would be 4.

Step 5: To change  $\frac{1}{4}$  into 12ths, you would follow the same procedure.

$$\frac{1}{4} = \frac{?}{12}$$

Step 6:  $4 \times 3 = 12$ , therefore  $1 \times 3 = 3$ . The top number would be 3.

Step 7: the new equation would be  $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$ .

Suppose you had a customer that required 3 catalogues. Each catalogue weighed  $\frac{1}{4}$  pound. How would you calculate the total weight of the catalogues?

$$3 \times \frac{1}{4} = \frac{3}{4}$$

\*\* A whole number is always assumed to be that number over 1, therefore 3 is  $\frac{3}{1}$ . \*\*

When you multiply fractions, you multiply across the top numbers (or numerators) and then multiply across the bottom numbers (or denominators).

Another example of multiplying fractions is  $\frac{1}{2} \times \frac{2}{3} = ?$  You would begin this problem by multiplying the top numbers ( $1 \times 2$ ) and then multiplying the bottom numbers ( $2 \times 3$ ) for an answer of  $\frac{2}{6}$ .

Whenever you are calculating fraction exercises, the answer should be shown in the simplest form. This is known as reducing the fraction, therefore  $\frac{2}{6}$  would be  $\frac{1}{3}$ . \*\*To reduce a fraction, you must divide the same number into both the top number and the bottom number.\*\* In this case, we found what number was divisible into 2 and 6. That number is 2, therefore  $2 \div 2 = 1$  and  $6 \div 2 = 3$ . The answer to this question would be  $\frac{1}{3}$ .

When multiplying a mixed fraction by a mixed fraction, you must convert the mixed fraction to an improper fraction. Here is an example:

$$3 \frac{1}{2} \times 4 \frac{2}{3} =$$

Step 1: Change the mixed fraction to an improper fraction.

$$3 \frac{1}{2} \text{ becomes } 2 \times 3 + 1 = 7$$

The improper fraction always keeps the same bottom number, so the new fraction would be  $\frac{7}{2}$ .

Step 2: Change the mixed fraction of  $4 \frac{2}{3}$  to an improper fraction.

$$\text{Multiply the } 3 \times 4 + 2 = 14$$

The new improper fraction would be  $\frac{14}{3}$ .

Step 3: Multiply  $\frac{7}{2} \times \frac{14}{3}$ .

$$\text{Multiply the top numbers or } 7 \times 14 = 98$$

$$\text{Multiply the bottom numbers or } 2 \times 3 = 6$$

Step 4: The new fraction would be  $\frac{98}{6}$ . This fraction needs to be changed to a mixed fraction because the top number is larger than the bottom number.

Step 5: How many times does 6 go into 98 or  $98 \div 6 = 16$  with some left over. The fraction is  $16 \times 6 = 96$ , and  $98 - 96 = 2$ . The answer to this question would be  $16 \frac{2}{6}$  or  $16 \frac{1}{3}$ .

This is how to divide a fraction. The question is  $1/2 \div 2/3$ .

Step 1: Invert the second fraction. Change  $2/3$  to  $3/2$  and multiply.

Step 2: The new equation is  $1/2 \times 3/2$

Step 3: Multiply the top numbers or  $1 \times 3 = 3$

Step 4: Multiply the bottom numbers or  $2 \times 2 = 4$

Step 5: The answer is  $3/4$

## **Exercise**

- 1) Your recipe for waffles calls for  $2/3$  cup flour. You wanted to make a double recipe. How much flour do you need?

$$2/1 \times 2/3 = \underline{\hspace{2cm}}$$

\*\* If your top number is greater than your bottom number, that means it is over 1\*\*  
Pretend the / is actually a divide sign. For instance in this case you would calculate  $4 \div 3 = 1$ . Then you take 4 and subtract 3 to get 1 left over or  $1/3$ . The answer is  $1 \frac{1}{3}$  cups of flour.

- 2) You run  $1/2$  mile a day. How many miles do you run in 6 days?

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- 3) Sandra takes  $3/4$  hour each evening completing her homework. How much time does she spend on homework for 5 evenings?

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- 4) John runs  $2/3$  mile every day for 8 days. How many miles does John run?

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- 5) Jim walks  $3/4$  mile every day for 7 days,  $2/3$  mile for 6 days and  $1/4$  mile for 7 days. How many miles has Jim walked?

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- 6) Now take your answer to question 5 and divide it by 20. This would be the average that Jim walks each day for 20 days.

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In this activity you had to understand basic fractions. This type of calculation or measurement is used in many occupations. Some of them are:

- General Office Clerks (NOC 1411) – when preparing complex documents, convert between fractions, decimals and percentages to make precise alignments for footers, margins, headers, and columns
- Storekeepers and Parts Clerks (NOC 1472) – measure lengths of wiring sold by the foot
- Other Assisting Occupations in Support of Health Services (NOC 3414) – measure the height and weight of patients
- Visiting Homemakers, Housekeepers and Related Occupations (NOC 6471) – measure quantities of ingredients for recipes, doubling or halving as necessary
- Kitchen Helpers and Line Cooks (NOC 6641) – convert recipes by multiplying or dividing all ingredients
- Residential and Commercial Installers and Servicers (NOC 7441a) – measure window frame dimensions and calculate how best to cut material from available stock
- Other Repairers and Servicers (NOC 7445) – measure the length or height of products, such as skis and bicycles
- Other Trades Helpers and Labourers (NOC 7612) – measure length, height and angles to lay flooring, to erect walls and baseboards and to install drywall
- Public Works and Maintenance Labourers (NOC 7621) – measure the dimensions of objects to be shipped to ensure they will fit in the boxcar or truck
- Fishing Vessel Deckhands (NOC 8441) – measure the length of a net or a line that needs repair or replacement
- Furniture Finishers and Refinishers (NOC 9494) – take measurements, such as lengths of wood needed to fabricate a missing piece

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
25	2 Measurement & Calculation - converting quantities by doubling	4 doubles a recipe	Kitchen Helpers & Line Cooks (NOC 6641)

Materials Required:	Copy of Workplace Activity 25 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 25 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li><li>2. Have the students complete the table for the ingredients of the pie. Depending on the skill level of the students, you might want to treat this as a group activity.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (25)

Document: 25  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- converting quantities  
by doubling  
LBS Level: 4  
- doubles a recipe

Today you are working in the local bakery. Your customers LOVE your Rhubarb Strawberry Crumble Pie!  
You are following a recipe for one 10" pastry shell. You need to prepare six 10" pies that your customers have already ordered!

Here is the recipe: Please complete the calculation for six pies.

Recipe for One Pie	Recipe for Six Pies
1 $\frac{1}{4}$ cups sugar	
$\frac{1}{4}$ cup flour	
1 cup yogurt or sour cream	
3 $\frac{1}{2}$ cups diced rhubarb	
1 $\frac{1}{2}$ cups sliced strawberries	
1 – 10" unbaked pastry shell	
$\frac{1}{2}$ cup packed brown sugar	
$\frac{1}{4}$ cup cold butter	

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
26	2 Measurement & Calculation - converting between measurement systems	3 converts from imperial to metric	Kitchen Helpers & Line Cooks (NOC 6641)

Materials Required:	If you have a set of measuring cups in imperial measures and metric measures, you might want to bring them for visual illustration. Copy of Workplace Activity 26 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 26 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li> <li>2. Have the students complete the table for the ingredients of the pie in millilitres. Depending on the skill level of the students, you might want to treat this example as a group activity.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (26)

Document: 26  
Essential Skill Level: 2  
Skill: Measurement & Calculation  
- converting between measurement systems  
LBS Level: 3  
- converts from imperial to metric

The above recipe is given in imperial measurements. Let's change the ingredients to metric measurements. Here is a metric cope chart.

All of the ingredients for the pie recipe are given in cups (c) and we are going to convert them to millilitres (ml).

### METRIC COPE CHART

$\frac{1}{4}$ CUP	= 60 ML
$\frac{1}{3}$ CUP	= 75 ML
$\frac{1}{2}$ CUP	= 125 ML
$\frac{2}{3}$ CUP	= 150 ML
$\frac{3}{4}$ CUP	= 175 ML
1 CUP	= 250 ML

<b>Cup Measurements</b>	<b>Millilitre Measurements</b>
1 ¼ cups sugar	
¼ cup flour	
1 cup yogurt or sour cream	
3 ½ cups diced rhubarb	
1 ½ cups sliced strawberries	
1 – 10” unbaked pastry shell	XXXXXXXXXX
½ cup packed brown sugar	
½ cup flour	
¼ cup cold butter	

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
27	2 Measurement & Calculation - converting between measurement systems	4 - solves simple, real life problems involving time, fractions, money, conversions	**Review of Calculations**

Materials Required:	Copy of Workplace Activity 27 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 27 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li><li>2. Have the students complete the exercise questions 1 – 9.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (27)

Here is a review of some problem solving we have done so far in the course:

Let's see how you do.

To complete the table, on the next page:

- First, identify what is the best operation to figure out the problem.  
For example, add, subtract, multiply or divide and circle the letter under the sign.
- Next, calculate the answer to the problem on another sheet of paper.
- Write your answer in the blank space under the "Answers" column.
- Insert the letter that corresponds with the function(+,-,×,÷) and write it on the next page to figure out the riddle.

Document: 27  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- converting between  
measurement systems  
LBS Level: 4  
- solves simple, real life  
problems involving  
time, fractions, money,  
conversions

PROBLEMS	+	-	×	÷	Answers
1. A roast will cook for 150 minutes. How long is that in hours?	A	C	E	T	
2. A muffin pan holds 8 muffins. If a recipe makes 24 muffins, how many pans do you need?	B	D	J	H	
3. There are 12 inches in one foot. How many inches are in 3 feet?	S	T	I	X	
4. There are 100 cm in 1 metre. How many cm in 5 metres?	F	H	S	O	
5. Fill in the blank. $6 \_ \frac{1}{2} = 12$	V	U	H	C	
6. How many toonies in ten dollars?	E	F	K	L	
7. There are 10 mm in a cm. How many mm in 2 cm?	T	D	A	C	
8. What is the total of 10¢, 25¢, 5¢ and 1¢?	S	G	M	N	
9. If you bought a shirt for \$18.00, what change would you get back if you paid with a \$20.00 bill?	Y	S	P	R	

Riddle: Who are experts at problem solving?

$\frac{\quad}{1}$ 
 $\frac{\quad}{2}$ 
 $\frac{\quad}{3}$ 
 $\frac{\quad}{4}$ 
 $\frac{\quad}{5}$ 
 $\frac{\quad}{6}$ 
 $\frac{\quad}{7}$ 
 $\frac{\quad}{8}$ 
 $\frac{\quad}{9}$ 
!!!!

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

The computer activity is found on the **Ontario Skills Passport** website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - skills.edu.gov.on.ca
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **7611- Construction Trades Helpers** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Money Math – Level 1**.
- Click on **Next**.
- Choose **7611 – Construction Trades Helpers – Traffic Supplies List**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the Numeracy - **Measurement & Calculation – Level 2**.
- Click on **Next**.
- Choose **7452 – Material Handlers – Bill of Lading**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

The next computer activity is found by entering the web address in the address bar.

- From the Google homepage, enter <http://www.globalclassroom.org/rulergame200/index.htm> in the address bar.
- Read the instructions for the game.
- You may want to begin the activity with the timer **off** until the students become familiar with the game.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## PRACTITIONER PAGE

### HOMEWORK FOR CLASS THIRTEEN

Take a look at some of the recipes the students brought with them. See if you can convert the imperial to metric measurements. If the recipe is written for 4 servings, have half of the class double the recipe and the other half of the class reduce the recipe for 2 servings.



## ANSWER KEY FOR THE PRACTITIONER EVERYDAY LIFE ACTIVITY

### Exercise

- 1)  $2/1 \times 2/3 = 4/3 = 1 \frac{1}{3}$  cups flour
- 2)  $1/2 \times 6/1 = 6/2 = 3$  miles
- 3)  $3/4 \times 5/1 = 15/4 = 3 \frac{3}{4}$  hours
- 4)  $2/3 \times 8/1 = 16/3 = 5 \frac{1}{3}$  miles
- 5)  $3/4 \times 7/1 = 5 \frac{1}{4}$   
 $2/3 \times 6/1 = 4$   
 $1/4 \times 7 = 1 \frac{3}{4}$  for a total of 11 miles
- 6)  $11 \div 20 = 11/1 \times 1/20 = 11/20$  miles per day

### WORKPLACE ACTIVITY (24)

Recipe for One Pie	Recipe for Six Pies
1 $\frac{1}{4}$ cups sugar	7 $\frac{1}{2}$ cups sugar
$\frac{1}{4}$ cup flour	1 $\frac{1}{2}$ cups flour
1 cup yogurt or sour cream	6 cups yogurt or sour cream
3 $\frac{1}{2}$ cups diced rhubarb	21 cups diced rhubarb
1 $\frac{1}{2}$ cups sliced strawberries	9 cups sliced strawberries
1 – 10” unbaked pastry shell	6 pastry shells
$\frac{1}{2}$ cup packed brown sugar	3 cups packed brown sugar
$\frac{1}{4}$ cup cold butter	1 $\frac{1}{2}$ cups cold butter

**ANSWER KEY FOR THE PRACTITIONER  
WORKPLACE ACTIVITY (25)**

<b>Cup Measurements</b>	<b>Millilitre Measurements</b>
1 $\frac{1}{4}$ cups sugar	310 ml
$\frac{1}{4}$ cup flour	60 ml
1 cup yogurt or sour cream	250 ml
3 $\frac{1}{2}$ cups diced rhubarb	875 ml
1 $\frac{1}{2}$ cups sliced strawberries	375 ml
1 – 10” unbaked pastry shell	XXXXXXXXXX
$\frac{1}{2}$ cup packed brown sugar	125 ml
$\frac{1}{2}$ cup flour	125 ml
$\frac{1}{4}$ cup cold butter	60 ml

**WORKPLACE ACTIVITY (26)**

- 1)  $\div$  T 2  $\frac{1}{2}$  hours
- 2)  $\div$  H 3 pans
- 3)  $\times$  I 36 inches
- 4)  $\times$  S 500 cm.
- 5)  $\div$  C Divide Sign
- 6)  $\div$  L 5 toonies
- 7)  $\times$  A 20 mm
- 8) + S 41 cents
- 9) - S \$2.00

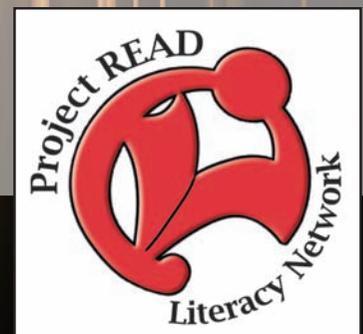
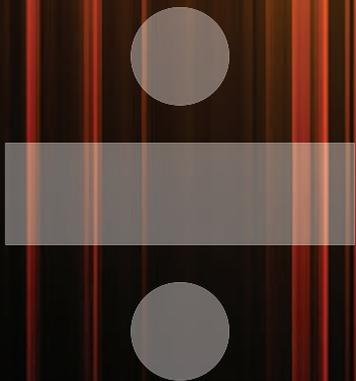
RIDDLE: WHO ARE EXPERTS AT PROBLEM SOLVING?

**THIS CLASS**



# CLASS FOURTEEN

Measurement  
& Numerical  
Estimation



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Calculation involving Distance
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing calculations for a road trip. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 - 4 of Everyday Life Activity. Depending on the skill level of the students, you might want to treat this exercise as a group activity.</li><li>3. Verbally, take up the answers with the students.</li><li>4. Read about the different occupations that use this skill in the workforce.</li></ol>

# CLASS NUMBER 14

Let's go on a road trip from the province of Ontario to Myrtle Beach, South Carolina!

## EVERYDAY LIFE ACTIVITY

What type of skills are involved in the planning of a road trip? Let's complete an exercise to answer some questions and find out.....

### Exercise

1. The total distance you are going to drive is 1,450 km. The first day you drive 500 km.

a) How many km do you still have remaining? \_\_\_\_\_  
\_\_\_\_\_

b) In order to reach Myrtle Beach in 2 more days, how many kilometres must you drive each day?  
\_\_\_\_\_  
\_\_\_\_\_

2. Your car uses 10 litres of gas for 100 km.

a) How many litres of gas will you need to travel 1,450 km? \_\_\_\_\_  
\_\_\_\_\_

b) The average price of gasoline is \$.95 per litre. How much will you pay for this road trip? \*\* Use your answer from (#1)\*\* \_\_\_\_\_  
\_\_\_\_\_

3. You are going to stay in a hotel for two nights. Each night costs \$95.00 plus 12% taxes. What are you paying for hotel accommodation?

---

4. Breakfast is included with your accommodation. Total your lunch and dinner for each day. The first day lunch is \$12.00 and dinner is \$18.00. The second day, lunch is \$8.00 and dinner is \$15.00. The third day, lunch is \$5.00 and dinner is \$22.00. You are travelling with your spouse, therefore the cost of the meals need to be doubled.

Day 1

---

Day 2

---

Day 3

---

GRAND TOTAL

---

In the previous everyday life activity you calculated the cost of a road trip. Rather than calculating the exact costs, you sometimes estimate the cost. Many occupations use this numerical estimation on the job:

- Travel Counsellors (NOC 6431) – estimate the price of a trip for a client looking for a general idea for cost
- Ticket and Cargo Agents & Related Clerks (NOC 6434) – enter expenses and receipts in a journal or computer, using pre-formatted computer templates
- Hotel Front Desk Clerks (NOC 6435) – prepare deposit sheets at the end of a shift balancing the change float and totalling all payouts
- Bus Drivers, Subway Operators and Other Transit Operators (NOC 7412) – estimate distances to travel against the level of fuel in the tank to determine when to refuel
- Delivery Drivers (NOC 7414) – estimate the time required for a particular delivery, considering distance, traffic conditions and the number of packages to be loaded and unloaded
- Automotive Mechanical Installers and Servicers (NOC 7443) – estimate the date of the next servicing, factoring in the service life of products used in the repair and signs that some parts, such as worn hoses, will need to be replaced soon.

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
27	2 Measurement & Calculation - calculating distance	3 - calculates mileage	Bus Drivers, Subway Operators & other Transit Operators (NOC 7412)

Materials Required:	Copy of Workplace Activity 28 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 28 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li><li>2. Have the students answer the questions. Depending on the skill level of the students, you might want to treat this example as a group activity.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (28)

Document: 28  
Essential Skill Level: 2  
Skill: Measurement  
& Calculation  
- calculating distance  
LBS Level: 3  
- calculates mileage

Today you are a bus driver. Your route takes you approximately 2 hours to complete. You have 60 stops on your route. How long do you drive, on average between stops? \*\* Remember what you are comparing is time and stops – you might want to change the hours to minutes\*\*

---

---

You have to go 20 kilometres and it takes you 2 hours. What is your average speed per hour?

---

---

You have travelled 15 kilometres out of 20 kilometres for your route. What is the fraction you have travelled? \_\_\_\_\_

What is the percentage you have completed? \_\_\_\_\_

How many kilometres do you have left to drive?

---

Your fuel gauge is reading  $\frac{7}{8}$  of a tank when you began your route. The tank holds 80 litres. How much fuel was in your tank when you began your route?

---

At the end of your route, the tank read  $\frac{3}{8}$ . How many litres of fuel did you use?

---

---

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
29	<p style="text-align: center;">1</p> Numerical Estimation - using a given formula in making estimates <p style="text-align: center;">2</p> Money Math - determining the total for accounts and/or bills	4	Automotive Mechanical Installers & Servicers (NOC 7443)

Materials Required:	Copy of Workplace Activity 29 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 29 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li> <li>2. Have the students complete the repair quote. Depending on the skill level of the students, you might want to treat this example as a group activity.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (29)

Today you are a service advisor at Joe's Motors. You greet the customers bringing in their cars for service. A major part of your job is to explain what types of service needs to be completed on the vehicle in the next couple of months.

Mrs. Green has an appointment on Monday at 9:00 am. Upon arrival, she is greeted by you and told to wait in the service department waiting room. The appointment was for a regular lube, oil and filter. However, today is her lucky day!! **Joe's Motors is offering a free 60 point inspection included in the price of the oil change!**

Upon completion of the inspection, they found:

- she only had 30% left on the brake pads on her front brakes
- she only had 40% on her brake shoes on the rear brakes
- the radiator hoses are getting hard and brittle and should be replaced
- the serpentine belt needs to be replaced

Document: 29

Essential Skill Level: 1

Skill: Numerical

Estimation

- using a given formula  
in making estimates

Essential Skill Level: 2

Skill: Money Math

- determining the total  
for accounts and/or bills

LBS Level: 4

- solves simple real life  
problems involving  
fractions and percent

Here is a listing of the parts prices and labour rates:

Front Brake Pads	\$80.00/set
Rear Brake Shoes	\$40.00/set
Rotors	\$23.95 each
Upper Radiator Hose	\$26.00 each
Serpentine Belt	\$42.00 each
Labour Rate	\$85.00/hour

# JOE'S MOTORS COMPANY LIMITED

## Repair Quote

**For: Mrs. Green**  
**Repaime, Ontario**

Quantity	Parts	Price	Extended Price
1 set	Front Brake Pads		
1 set	Rear Brake Shoes		
2	Rotors		
1	Upper Radiator Hose		
1	Serpentine Belt		
5 ½ hours	Labour		
		Total Parts	
		Total Labours	
		SUBTOTAL	
		HST (13%)	
		TOTAL	

## COMPUTER ACTIVITIES

Time Allotted:  
30 - 45 minutes

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org, select **Everyday Life**.
- Scroll down to **Bus Map** and click on it.
- Start Activity by clicking on **Start Activity**. Information Required for Choosing What Time To Catch The Bus. **You need to leave home at 8:25am to arrive at 8:40 for interview at 9:00 am**

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **7413 – Taxi Cab Driver** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice .
- Click on **next**.
- Under the heading Numeracy, check **Measurement & Calculation – Level 1**.
- Click on **next**.
- Choose 7413 – **Taxi Cab Driver – Sample Forms**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the Numeracy-**Money Math– Level 2.**
- Click on **next.**
- Choose **7443- Auto Installers – Estimate and Invoice.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

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- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **PRACTITIONER PAGE**

### **HOMEWORK FOR CLASS FOURTEEN**

Ask the students to think about the distance from their home to the class. If they do not know the distance, have them look it up on Map Quest or Google Maps. Provide the students the address of the classroom.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

### Exercise

1) (a)  $1,450 - 500 = 950$  km

(b) 475 each day or any combination to total 950 km

2) (a)  $\frac{10}{100} = \frac{145}{?}$        $145 \times 100 \div 10 = 145$  litres

(b)  $.95 \times 145 = \$137.75$

3)  $95 \times 2 = 190$      $190 \times 12\% = \$22.80$   
 $190 + 22.80 = \$212.80$

4) Day One     $12.00 + 18.00 = 30.00 \times 2 = 60.00$   
Day Two     $8.00 + 15.00 = 23.00 \times 2 = 46.00$   
Day Three     $5.00 + 22.00 = 27.00 \times 2 = 54.00$   
Grand Total = \$160.00

## WORKPLACE ACTIVITY (28)

2 Hours = 120 minutes

$\frac{120 \text{ minutes}}{60 \text{ stops}} = \frac{?}{1}$        $120 \times 1 \div 60 = 2$  minutes

$\frac{20 \text{ km}}{2 \text{ hours}} = \frac{?}{1 \text{ hour}}$        $20 \times 1 \div 2 = 10$

$\frac{15}{20} = \frac{3}{4}$  of route or 75% completed

5 km left

70 litres

$\frac{7}{8} - \frac{3}{8} = \frac{4}{8}$   
or  $\frac{1}{2}$  of 80 = 40 litres

# ANSWER KEY FOR THE PRACTITIONER

## WORKPLACE ACTIVITY (29)

Extended Price

\$80.00

0.00

47.90

33.90

26.00

42.00

5 ½ labour 467.50

Total Parts 269.80

Total Labour 467.50

Subtotal \$737.60

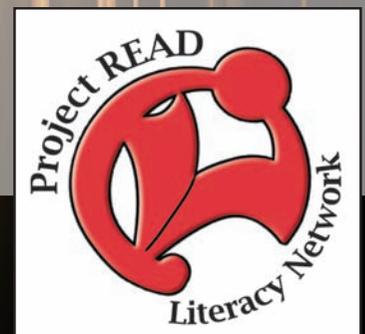
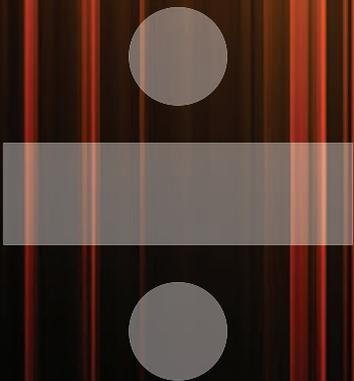
HST 95.89

**Grand Total \$833.49**



# CLASS FIFTEEN

## Reading Labels



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Reading Medicine Labels
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by introducing calculations for reading labels. This can also be shown on a whiteboard or chalkboard for reinforcement of skills.</li><li>2. Have the students complete Exercise questions 1 – 8 (using the medicine dosage table) of Everyday Life Activity. Depending on the skill level of the students, you might want to treat this exercise as a group activity.</li><li>3. Verbally, take up the answers with the students.</li><li>4. Read about the different occupations that use this skill in the workforce.</li></ol>

## CLASS NUMBER 15

In this class, we are going to take a look at reading labels on medication, both from local drugstores and prescription medication. Reading and understanding labels printed on medicine bottles is a very important skill to keep your family safe.

### EVERYDAY LIFE ACTIVITY

Below, is a children's dosage guide for **Feel Better Medicine**:

<b>Child's Weight and Child's Age</b>	<b>Infant's Feel Better Drops</b> 80 mg/0.8 ml	<b>Children's Feel Better Liquid</b> 160 mg/5 ml	<b>Children's Feel Better Chews</b> 80 mg each	<b>Junior Feel Better Chews</b> 160 mg each
<b>6-11 lbs.</b> 0 - 3 months	CONSULT YOUR CHILD'S DOCTOR			
<b>12-17 lbs.</b> 6 - 11 months	CONSULT YOUR CHILD'S DOCTOR			
<b>18-23 lbs.</b> 12 - 23 months	CONSULT YOUR CHILD'S DOCTOR			
<b>24-35 lbs.</b> 2 - 3 years	1.6 ml = 0.8 + 0.8 ml	1 tsp or 5ml	2 tablets	Not recommended
<b>36-47 lbs.</b> 4 - 5 years	Not recommended	1 ½ tsp or 7.5 ml	3 tablets	Not recommended
<b>48-59 lbs.</b> 6 - 8 years	Not recommended	2 tsp or 10 ml	4 tablets	2 tablets
<b>60-71 lbs.</b> 9 - 10 years	Not recommended	2 ½ tsp or 12.5 ml	5 tablets	2 ½ tablets
<b>72-95 lbs.</b> 11 years	Not recommended	3 tsp or 15 ml	6 tablets	3 tablets
<b>96 + lbs.</b> 12 years	Not recommended	Not recommended	Not recommended	4 tablets

Please answer the following information by consulting the table:

- 1) If your child is 45 pounds, how much Children's Feel Better Liquid should you give him?  
\_\_\_\_\_
- 2) If your child weighs 69 pounds, how much Children's Feel Better Chews should you give him?  
\_\_\_\_\_
- 3) If your child is over 100 pounds, how much Junior Feel Better Chews should you give him?  
\_\_\_\_\_
- 4) If your child is 30 pounds, how much Infant's Feel Better Drops should you give him?  
\_\_\_\_\_
- 5) If your child is under 18 pounds, how much Infant's Feel Better Drops should you give him?  
\_\_\_\_\_
- 6) If your child is 55 pounds, how much Infant's Feel Better Drops should you give him?  
\_\_\_\_\_
- 7) If your child is 70 pounds, how much Children's Feel Better Liquid should you give him?  
\_\_\_\_\_
- 8) For question 7, how many Children's Feel Better Chews should you give him?  
\_\_\_\_\_

In this exercise you were able to read a children's dosage guide for Infant's and Children's Feel Better Medicine.

This same skill is used in many occupations requiring measurement and calculation. Here are some of the occupations:

- Correctional Service Officers (NOC 6462) - measure out amounts of medication that inmates require
- Estheticians, Electrologists and Related Occupations (NOC 6482) - measure specified amounts of emulsions, creams, sterilants and other products, diluting as specified
- Pet Groomers and Animal Care Workers (NOC 6483) - prepare feed mixtures according to specified ratio
- Pest Controllers & Fumigators (NOC 7444) - mix chemicals in specified percentages
- Construction Trades Helpers (NOC 7611) - measure quantities of cement and water according to instructions
- Nursery & Greenhouse Workers (NOC 8432) - measures required amount of plant food, soil mixtures and fertilizers and calculates the amount of concentrate needed to prepare a plant food solution
- General Farm Workers (NOC 8431) - measure a dosage of medicine or vaccine to inject into an animal

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
29	1 Measurement & Calculation - taking measurements & recording results	4 - reads & interprets amounts on food packages	General Farm Workers (NOC 8431)

Materials Required:	Copy of Workplace Activity 30 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 30 by reading the introduction. Illustrate the calculations on a whiteboard or chalkboard.</li> <li>2. Have the students answer the questions by referring to the information in the table. Depending on the skill level of the students, you might want to treat this example as a group activity.</li> <li>3. Once the students have finished, verbally take up the activity.</li> </ol>

## WORKPLACE ACTIVITY (30)

Document: 30  
Essential Skill Level: 1  
Skill: Measurement  
& Calculation  
- taking measurements  
& recording results  
LBS Level: 4  
- reads & interprets  
amounts on food  
packages

Today you are working as an Animal Care Worker on a local farm in your community. It is feeding time for some of the animals!!

Please read the chart below to calculate how much to feed the animals.

### WEIGHT OF ANIMALS.

Age	1.3 – 5.5 kg	5.5 - 9.0 kg.	9.0 - 22.5 kg.	23.2 - 34.1 kg.	34.1 - 45 kg.	Over 45 kg.
<b>1 ½ - 3 months</b>	56 - 75 grams	56 - 112 grams	56 - 112 grams	56 - 187 grams	75 - 299 grams	299 grams
<b>4 - 5 months</b>	56 - 112 grams	112 - 140 grams	168 - 224 grams	168 - 308 grams	252 - 448 grams	448 grams
<b>6 - 8 months</b>	56 - 112 grams	84 - 112 grams	112 - 187 grams	149 - 299 grams	336 - 504 grams	504 grams
<b>9 - 11 months</b>	Feed as an adult	112 grams	187 - 224 grams	261 - 364 grams	709 - 868 grams	968 grams
<b>1 - 2 years</b>	75 - 110 grams	112 - 140 grams	224 - 299 grams	280 - 476 grams	588 - 840 grams	842 grams
<b>3 - 5 years</b>	75 - 110 grams	112 - 140 grams	224 - 299 grams	280 - 476 grams	588 - 840 grams	842 grams

## **Exercise**

1) Your goat weighs 8.0 kg and is 7 months old. How much food do you feed her?

---

2) Your lamb is 2 months old and weighs 3.5 kg. How much food do you feed him?

---

3) The barn cat is 8 months old and weighs 3.5 kg. How much food do you feed her?

---

4) Your chicken is 1  $\frac{1}{2}$  years old and weighs 5 kilograms. How much food do you feed her?

---

5) Your farm dog is 2 years old and weighs 50 kilograms. How much food do you feed him?

---

6) Your rabbit is 4 years old and weighs 5 kilograms. How much food do you feed her?

---

7) Your guinea pig is 3 years old and weighs 3 kilograms. How much food do you feed him?

---

8) Your pig is 2 months old and weighs 20 kilograms. How much food do you feed her?

---

9) Your rooster is 7 months old and weighs 6 kilograms. How much food do you feed him?

---

10) Your goat is 10 months old and weighs 35 kilograms. How much food do you feed him?

---

## COMPUTER ACTIVITIES

Time Allotted:  
60 minutes

The first website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org, select **Everyday Life**.
- Scroll down to **Bus Map** and click on it.
- Start Activity by clicking on **Start Activity**. Information Required for Choosing What Time To Catch The Bus. **You need to leave home at 8:25 am to arrive at 8:40 am for interview at 9:00 am**

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **7413 – Taxi Cab Driver** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice .
- Click on **next**.
- Under the heading Numeracy, check **Measurement & Calculation – Level 1**.
- Click on **next**.
- Choose **7413 – Taxi Cab Driver – Sample Forms**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

Staying in the Ontario Skills Passport website:

- Click on the Back button until you reach the page with the Numeracy - **Measurement & Calculation – Level 2.**
- Click on **next.**
- Choose **6651 – Security Guards – Security Guard Security Information.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

The next website is [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life.**
- Scroll down **to Food Labels** and click on it.
- Start Activity by clicking on **Start Activity.**

Staying in [www.GCFLearnFree.org](http://www.GCFLearnFree.org).

- From the Google homepage type **GCFLearnFree**
- Under the heading Free-Online Learning at GCFLearnFree.org select **Everyday Life.**
- Scroll down **to Label Practice** and click on it.
- Start Activity by clicking on **Start Activity.**

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

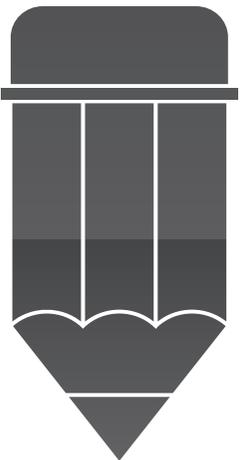
- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

## **HOMEWORK FOR CLASS FIFTEEN**

For tomorrow's class, bring in a label from any item you happen to have in your household.



# ANSWER KEY FOR THE PRACTITIONER

## EVERYDAY LIFE ACTIVITY

### Dosage Guide

- 1) 1 ½ tsp OR 7.5 ml.
- 2) 5 tablets
- 3) 4
- 4) 1.6 ml.
- 5) consult your child's doctor
- 6) not recommended
- 7) 2 ½ tsp. or 12.5 ml.
- 8) 5 tablets

## WORKPLACE ACTIVITY (30)

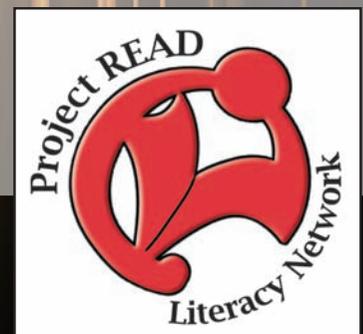
### Exercise

- 1) 84 - 112 grams
- 2) 56 - 75 grams
- 3) 56 - 112 grams
- 4) 75 - 110 grams
- 5) 842 grams
- 6) 5 - 110 grams
- 7) 75 - 110 grams
- 8) 56 - 112 grams
- 9) 84 - 112 grams
- 10) 709 - 868 grams



# CLASS SIXTEEN

## Monitoring & Calculation



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	Reading Food Labels
Materials Required:	Copy of Everyday Life Activity to be handed out to students on 3 hole punched paper.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by asking the students if they have any knowledge of the information found on food labels. Some possible answers are found on the answer sheet at the end of the class.</li><li>2. Take a look at the chart indicating how many servings of the 4 different food groups people should have at different ages.</li><li>3. Have the students complete the exercise for the Everyday Life Activity. It might be interesting to pair up students so they may co-operatively work together on this activity.</li><li>4. Verbally, take up the answers with the students.</li><li>5. Read about the different occupations that use this skill in the workforce.</li></ol>

## CLASS NUMBER 16

Have you ever looked at a label on a food product? What type of information is found there and how do we use it?

If we were using the Canada Food Guide as a guideline, just how many servings of different foods should a person eat? Well, that certainly depends on your age and your estimated energy requirements.

### EVERYDAY LIFE ACTIVITY

Find your age and sex in the chart to see how much food you need.

**Recommended Number of Food Guide Servings per Day**

Ages	Children			Teens		Adults		Adults	
	2 - 3	4 - 8	9 - 13	14 - 18		19 - 50		51 +	
	Girls and Boys			F	M	F	M	F	M
Vegetables and Fruit	4	5	6	7	8	7 - 8	8 - 10	7	7
Grain Products	3	4	6	6	7	6-7	8	6	7
Milk & Alternatives	2	2	3 - 4	3 - 4	3 - 4	2	2	3	3
Meat & Alternatives	1	1	1 - 2	2	3	2	3	2	3

## What is a food guide serving?

### Vegetables and Fruit

- 125 ml ( $\frac{1}{2}$  cup) fresh, frozen or canned vegetable or fruit or 100% juice
- 250 ml (1 cup) leafy raw vegetables or salad
- 1 piece of fruit

### Grain Products

- 1 slice (35 g) bread or  $\frac{1}{2}$  bagel (45g)
- $\frac{1}{2}$  pita (35 g) or  $\frac{1}{2}$  tortilla (35 g)
- 125 ml. ( $\frac{1}{2}$  cup) cooked rice, pasta, or couscous
- 30 g cold cereal or 175 ml ( $\frac{3}{4}$  cup) hot cereal

### Milk Alternatives

- 250 ml. (1 cup) milk or fortified soy beverage
- 175 g ( $\frac{3}{4}$  cup) yogurt
- 50 g (1  $\frac{1}{2}$  oz.) cheese

### Meat and Alternatives

- 75 g (2  $\frac{1}{2}$  oz.)/125 ml ( $\frac{1}{2}$  cup) cooked fish, shellfish, poultry or lean meat
- 175 ml. ( $\frac{3}{4}$  cup) cooked beans
- 2 eggs
- 30 ml. (2 tbsp.) peanut butter

## **Exercise**

1. Record the number of servings for a 40 year old female and a 52 year old male. Include the four main food groups.

40 year old female \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

52 year old male \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This monitoring or calculating of items is done in many occupations. They include:

- Nurse Aides and Orderlies (NOC 3413) - calculate patient's weight
- Early Childhood Educator Assistants (NOC 4214) - calculate cost of supplies needed for activities
- Sales Representatives - Wholesale Trade (NOC 6411) - prepare quotations for customers
- Ticket & Cargo Agents & Related Clerks (NOC 6434) - add together tickets for trips calculating the taxes and to tally the bill
- Local Tour Guides (NOC 6441a) - add up invoices and do expense reports
- Janitors, Caretakers & Building Superintendents (NOC 6663) - calculate the cost of supplies by multiplying unit prices by quantities and totaling them
- Bus Drivers, Subway Operators & Other Transit Operators (NOC 7412) - total receipt records to balance the shift reports
- Heavy Equipment Operators (Except Crane) (NOC 7421) - calculate the amount to be billed by multiplying the number of hours taken to complete the job by the cost of the machine per hour
- Harvesting Labourers (NOC 8611) - receive payments from customers after delivering and unloading crates of farm produce

## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
31	3 Scheduling - decide how many servings and then create a menu plan	3 - collects data & records results	Kitchen Helpers & Line Cooks (NOC 6641)

Materials Required:	Copy of Workplace Activity 31 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"><li>1. Introduce Workplace Activity 31 by reading the introduction.</li><li>2. Have the students answer the questions by referring to the information found on page 16-4.</li><li>3. Once the students have finished, verbally take up the activity.</li></ol>

## WORKPLACE ACTIVITY (31)

Document: 31  
Essential Skill Level: 1  
Skill: Scheduling  
- recording costs  
  according to categories  
LBS Level: 3  
- collects data & records  
  results

In question number one from the Everyday Life Activity, you recorded how many servings of four different food groups a 40 year old female and a 52 year old male should consume.

Let's take it one step further. The four different food groups are:

- Grain Products
- Vegetables and Fruit
- Milk Alternatives
- Meat & Alternatives

Complete a menu plan for the 40 year old woman, keeping in mind the minimum number of servings required from each of the four food groups. The first entry has been made for you.

Breakfast - **Food Group - Grain Products - ½ bagel (1 serving)**

---

---

---

---

---

Lunch

---

---

---

---

---

Dinner

---

---

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---

Complete a menu plan for the 52 year old man, keeping in mind the minimum number of servings required from each of the four food groups. The first entry has been made for you.

The four different food groups are:

- Grain Products
- Vegetables and Fruit
- Milk Alternatives
- Meat & Alternatives

Breakfast - **Food Group - Grain Products - ½ bagel (1 serving)**

---

---

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---

---

Lunch

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Dinner

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## PREPARATION PAGE FOR THE PRACTITIONER

### WORKPLACE ACTIVITY

ACTIVITY NUMBER	ESSENTIAL SKILL LEVEL & SKILL	LBS LEVEL & SKILL	N.O.C.
32	<p style="text-align: center;">2</p> <p>(Invoice) Money Math - determines total for simple bills</p> <p style="text-align: center;">2</p> <p>(Exercise) Data Analysis - calculating simple numerical comparisons</p>	<p style="text-align: center;">2</p> <p>- uses multiplication to solve simple, real life problems</p> <p style="text-align: center;">3</p> <p>- calculates unit prices to determine best buy</p>	Harvesting Labourers (NOC 8611)

Materials Required:	Copy of Workplace Activity 32 to be handed out to students on 3 hole punched paper.
Time Allotted:	30 - 45 minutes
Activity:	<ol style="list-style-type: none"> <li>1. Introduce Workplace Activity 32 by reading the introduction.</li> <li>2. Have the students complete the invoice obtaining the Grand Total.</li> <li>3. Once the students have finished, verbally take up the activity.</li> <li>4. Begin the exercise by finding the better price. You might want to illustrate on a whiteboard or chalkboard the calculations involved in the comparison pricing by finding out the unit price first.</li> </ol>

## WORKPLACE ACTIVITY (32)

Today you are employed by a local farmer. You are working at the local farmer's market selling vegetables. A customer is beginning an order and you are completing an invoice:

Document: 32  
Essential Skill Level: 1  
Skill: Money Math (inv)  
- determines total for simple bills  
LBS Level: 2  
- uses multiplication to solve simple, real life problems  
Essential Skill Level: 1  
Skill: Data Analysis (exercise)  
- making simple numerical comparisons  
LBS Level: 3  
- calculates unit prices to determine best buy

Quantity	Description	Unit Price	Total Price
1	basket of potatoes	\$3.00	
1	basket of green beans	\$2.50	
3	cucumbers	\$ .75 each	
2	broccoli	\$1.50 each	
2	heads of lettuce	\$1.25 each	
4	baskets of tomatoes	\$2.00 each	
3	stalks of celery	\$1.10 each	
3	green onions	\$ .50 each	
		GRAND TOTAL	\$

This same farmer likes to see how customer's numeracy skills measure up!!!

**\*\*Hint: Calculate the per unit price of the item\*\***

**Exercise**

1) What is the better price - 3 baskets of potatoes for \$5.00 OR 4 baskets of potatoes for \$6.00?

---

---

---

---

2) What is the better price - 4 cucumbers for \$1.50 OR 3 cucumbers for \$1.00?

---

---

---

---

3) What is the better price - 4 baskets of tomatoes for \$8.00 OR 6 baskets of tomatoes for \$9.00?

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## COMPUTER ACTIVITIES

Time Allotted:  
45 - 60 minutes

Our first computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 1**.
- Click on **How Canadians Spend Their Money**.
- Complete the Activity.

The next computer activity is found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - [skills.edu.gov.on.ca](http://skills.edu.gov.on.ca)
- Choose **Occupations and Tasks**.
- Check **Sorted By NOC**.
- Click on **Next**.
- Find **7411 – Truck Drivers** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **Next**.
- Under the heading Numeracy, check **Money Math – Level 1**.
- Click on **next**.
- Choose **7411 – Truck Drivers – Registration Form**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

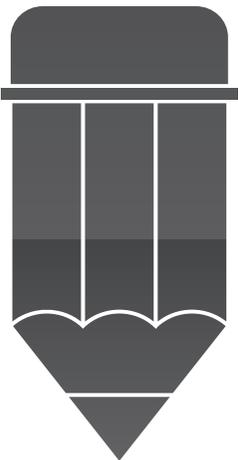
## **PRACTITIONER PAGE**

### **HOMEWORK FOR CLASS SIXTEEN**

Take a look at some of the labels that have been supplied by the students for today.

You may want to establish what food group the item fits into and whether or not it would be a good choice for a person's diet.

Tomorrow's class is a review class of all the skills we have learned in the program. Have the students review the material from the past 15 classes. Are there any questions about any of the calculations we have done so far?



## ANSWER KEY FOR THE PRACTITIONER

Possible Answers for the Question:

- Nutritional Fact Information
- Ingredients of Product
- Nutrient content claims (tells you about one nutrient such as: No sugar added), and
- Health Claims (tells you how your diet can affect your health such as: may say that a healthy diet rich in a variety of vegetables and fruit may help to reduce the risk of some types of cancer).

### EVERYDAY LIFE ACTIVITY

		Servings
40 year old female	Vegetables & Fruit	7-8
	Grain Products	6-7
	Milk Alternatives	2
	Meat & Alternatives	2
52 year old male	Vegetables & Fruit	7
	Grain Products	7
	Milk Alternatives	3
	Meat & Alternatives	3

## ANSWER KEY FOR THE PRACTITIONER

**WORKPLACE ACTIVITY (31) \*\*This activity may be completed in many different ways. Just make sure the total servings are correct for the specific age group\*\***

Food Group	Description of Item	Number of Servings
<b>Breakfast</b>		
Grain Products	½ bagel	1 serving
Fruit & Vegetables	½ cup 100% fruit juice	1 serving
Fruit & Vegetables	1 piece of fruit	1 serving
Grain Products	¾ cup of hot cereal	1 serving
<b>Lunch</b>		
Grain Products	½ pita	1 serving
Meat & alternatives	2 eggs	1 serving
Milk	1 cup of milk	1 serving
Milk & Alt.	1 ½ ounces of cheese	1 serving
Grain Products	½ cup of cooked rice	1 serving
Fruit & Vegetables	2 pieces of fruit	2 servings
<b>Dinner</b>		
Meat	2 ½ ounces of poultry	1 serving
Grain Products	1 slice of bread	1 serving
Fruit & Vegetables	1 cup of raw vegetables	1 serving
Grain Products	½ cup pasta	1 serving
Grain Products	½ cup couscous	1 serving
Fruit & Vegetables	2 pieces of fruit	2 servings

### TOTALS

<b>Vegetables &amp; Fruit</b>	<b>7 servings</b>
<b>Grain Products</b>	<b>7 servings</b>
<b>Milk Alternatives</b>	<b>2 servings</b>
<b>Meat &amp; Alternatives</b>	<b>2 servings</b>

This has been completed for the 40 year old female. Increase the milk alternatives to 3 servings and the meat & alternatives to 3 servings to complete the information for the 52 year old male.

# ANSWER KEY FOR THE PRACTITIONER

## WORKPLACE ACTIVITY (32)

Quantity	Description	Unit Price	Total Price
1	basket of potatoes	\$3.00	\$3.00
1	basket of green beans	\$2.50	\$2.50
3	cucumbers	\$ .75 each	\$2.25
2	broccoli	\$1.50 each	\$3.00
2	heads of lettuce	\$1.25 each	\$2.50
4	baskets of tomatoes	\$2.00 each	\$8.00
3	stalks of celery	\$1.10 each	\$3.30
3	green onions	\$ .50 each	\$1.50
		GRAND TOTAL	\$26.05

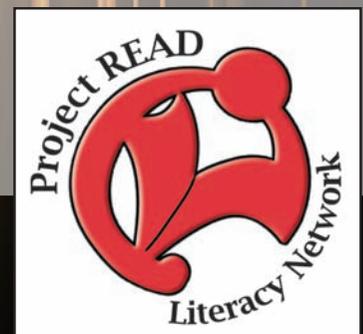
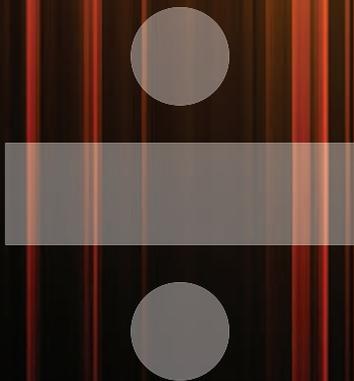
### Exercise

- 1) 3 for \$5.00 = 1.67 each  
4 for \$6.00 = 1.50 each \*\*\*\*better buy
- 2) 4 for \$1.50 = .38 each  
3 for \$1.00 = .33 each \*\*\*\* better buy
- 3) 4 for \$8.00 = 2.00 each  
6 for \$9.00 = 1.50 each \*\*\*\*better buy



# CLASS SEVENTEEN

## Skill Review



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Everyday Life Activity</b>
Purpose:	A Review of Numeracy Skills
Materials Required:	A copy of the Computer Activities handed out to the students on 3 hole punched paper.
Time Allotted:	1 ½ to 2 hours
Activity:	<ol style="list-style-type: none"><li>1. Have the students proceed to the computer and complete the computer activities for a review of the skills. The first two activities will be new for the students. The rest are a review from previous classes.</li><li>2. If the students require more of a challenge, you may also complete the activities found on the Ontario Skills Passport Website that have been completed in past classes. These are also listed for you Some activities that have <b>not</b> been included in the curriculum before, are included for students wanting a change.</li><li>3. The students can also complete activities on The Learning Hub for additional reinforcement of numeracy skills.</li></ol>

## CLASS NUMBER 17

Time Allotted:  
1 ½ - 2 hours

This class serves as a review for all of the previous classes. Let's take a look at everything you have learned to date and ask ourselves if we would like to review any of the skills again.....

In the time allotment, try to complete activities one through eight. The activities found on the Ontario Skills Passport Website can be done as homework for the students. All of the activities for this class will be done on the computer.

## COMPUTER ACTIVITIES

### Activity One

The first website is [www.mathplayground.com](http://www.mathplayground.com)

- From the Google homepage, enter **math playground**.
- Under the heading **Math Playground**, click on **Videos**.
- Click on **Math Videos** (located in the left hand column).
- Complete activities in Fractions, Decimals, Percent, Ratio and Proportion, and Measurement and Data.

### Activity Two

The next activity is also found in [www.mathplayground.com](http://www.mathplayground.com)

- From the Google homepage, enter **math playground**.
- Select **Math Playground**.
- Scroll down to **Math Games** (located on the left hand side of the page) and click on it.
- Scroll halfway down the page and Click on **Math at the Mall**.
- Click on How To (and read the directions).
- Click on Start – Choose a character.
- To begin the game, move the character to the end of the pathway past the signs for Toys, Bank, Cafe, and Gym.
- Complete the Activities in each section.
- For a challenge, click on **Try Math At The Mall – Percentages**.

### Activity Three

Our next computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 6**.
- Click on **Workplace Schedules**.
- Complete the Activity.

### Activity Four

The next computer activity is also found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 6**.
- Click on **Is Your Paycheque Accurate?**
- Complete the Activity.

### Activity Five

The next computer activity is found on the Alpharoute website.

- Under Google – type **alpharoute**
- Select **Alpharoute – Home 199.71.28.160/**
- Click on **Do Activities**.
- Click on **Employment Area**.
- Click on **Skills at Work – Activities “Go There Now”**.
- Complete Activities.

### Activity Six

The next computer activity is also found on the Alpharoute website.

- Under Google – type **alpharoute**
- **Select Alpharoute – Home 199.71.28.160/**
- Click on **Do Activities**.
- Click on **Employment Area**.
- **Math at Work – Measurement**.
- To complete activities for measurement, click on the button to the right of the screen – choose Imperial Quiz 1 – 5 and Metric Quiz 1-5.

## Activity Seven

The next computer activity is also found on the Alpharoute website.

- Under Google – type **alpharoute**
- **Select Alpharoute – Home 199.71.28.160/**
- Click on **Do Activities.**
- Click on **Employment Area.**
- **Math at Work – Calculating Area.**
- Complete Activity 1 – 5.

## Activity Eight

The next computer activity is also found on the Alpharoute website.

- Under Google – type in **alpharoute**
- **Select Alpharoute – Home 199.71.28.160**
- Click on **Do Activities.**
- Click on **Employment Area.**
- Click on **Math at Work.**
- Click on **Estimating.**
- Complete Activities.

## For Additional Activities

More computer activities are found on the Ontario Skills Passport website.

- From the Google homepage, enter **Ontario Skills Passport**
- Choose Ontario Skills Passport - skills.edu.gov.on.ca
- Choose **Occupations and Tasks**.
- Check **Sorted by NOC**.
- Click on **Next**.
- Find **3413 – Nurse Aides, Orderlies & Patient Service Associates** – click on the check mark.
- Scroll down the page to **Essential Skills – Related Assessment Tools**.
- Click on **OSP Check Up Tools**.
- Click on **#2 – Facilitated Essential Skills Check-Up Tool**.
- Check off **second box** – check out one Essential Skill to practice.
- Click on **next**.
- Under the heading Numeracy, check **Numerical Estimation – level 1**.
- Click on **next**.
- Choose **3413 – Nurse Aides, Orderlies & Patient Service Associates – Notebook**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Complete Task 1 – submit answer.
- Complete Task 2 – submit answer.
- Complete Task 3 – submit answer.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

## Next Activity

- Click on back button until you see under the heading Numeracy - **Numerical Estimation Level 1**.
- Click on **next**.
- Choose **7611 – Construction Trades Helpers & Labourers Task Assignment**.
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Click on Next until you reach Task 4.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **Next** to review your results card.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Numerical Estimation – Level 1.**
- Click on **Next.**
- Choose **6681- Dry Cleaning and Laundry Operations – Claim Check.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Click on Submit Answer for Task 1, 2 and 3 without completing the task and then continue to...
- Complete Task 4.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

### Next Activity

- Click on back button until you see under the heading **Numeracy-Numerical Estimation – Level 1.**
- Click on **Next.**
- Choose **7611- Construction Trades Helpers – Task Assignment.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

### Next Activity (This activity was not completed in the classes)

- Click on back button until you see under the heading **Numeracy - Numerical Estimation – Level 2.**
- Click on **Next.**
- Choose **3414 – Other Assisting Occupations – Product Update.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

Next Activity (This activity was not completed in the classes)

- Click on back button until you see under the heading **Numeracy-Numerical Estimation – Level 2.**
- Click on **Next.**
- Choose **8432 – Nursery & Greenhouse Workers – Product Catalogue.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
  - Choose **8432-Nursery & Greenhouse Workers Landscape Design.**
  - Check out a Real Workplace Activity Set.
  - Select **On-line version** and click on continue.
  - Submit answer.
  - Finish Now.
  - Enter your information.
  - Click on **next** to review your results card.

Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose **1471 – Shipper/Receiver Packing List.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose **3414 – Other Assisting Occupations in Support of Health Services – Preparing Medicines.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose **7611 - Construction Trades Helpers – Timesheets.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your results card.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose **7413 – Taxi Cab Driver – Sample Forms.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 1.**
- Click on **Next.**
- Choose 7413 – **Taxi Cab Driver – Sample Forms.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity (This was not completed in the classes)

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose 1432 – **Payroll Clerks – Payroll Record.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy-**Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose 7611 – **Construction Trades Helpers & Labourers Calculating Materials.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy-**Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **7611 - Construction Trades Helpers & Labourers Floor Plan.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy-**Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **8432 – Nursery & Greenhouse Workers Product Guide.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy-**Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **3413 – Nurse Aides, Orderlies & Patient Services – ADL Sheet.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy-**Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **7452 – Material Handlers – Bill of Lading.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see under the heading Numeracy – **Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **6611 – Cashiers – Cashier Product PLU Sheet.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy-**Measurement & Calculation– Level 2.**
- Click on **Next.**
- Choose **6651 – Security Guards – Security Guard Security Information.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy - **Measurement & Calculation – Level 2.**
- Click on **Next.**
- Choose **6611 – Cashiers – Cashier Product PLU Sheet.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy –**Money Math – Level 1.**
- Click on **Next.**
- Choose **7411 – Truck Drivers – Registration Form.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy –**Money Math– Level 1.**
- Click on **Next.**
- Choose **7611 – Construction Trades Helpers – Traffic Supplies List.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy-**Money Math– Level 2.**
- Click on **Next.**
- Choose **7443- Automotive Mechanical Installers – Estimate and Invoice.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 1.**
- Click on **Next.**
- Choose **1411 – General Office Clerks – Host Reconciliation Form.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 1.**
- Click on **Next.**
- Choose **3411 – Dental Assistants – Insurance Claim.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 1.**
- Click on **Next.**
- Choose **7611 – Construction Trades Helpers – Waste Removal.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 1.**
- Click on **Next.**
- Choose **7621 – Public Works & Maintenance Labourers – Collective Agreement.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

Next Activity

- Click on back button until you see the heading Numeracy –**Scheduling & Budgeting– Level 1.**
- Click on **Next.**
- Choose **1441 – Administrative Clerks – Supply Order Form.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 2.**
- Click on **Next.**
- Choose **1442 – Personnel Clerks – Collective Agreement.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
  - Click on **next** to review your result.

Next Activity (This was not completed in the classes)

- Click on back button until you see the heading Numeracy – **Scheduling & Budgeting – Level 2.**
- Click on **Next.**
- Choose **3414 – Other Assisting Occupations in Health – Product Update.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

Next Activity

- Click on back button until you see the heading Numeracy-**Scheduling & Budgeting– Level 2.**
- Click on **Next.**
- Choose **6641 – Kitchen Helpers & Line Cooks – Fast Food Counter Attendant.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

### Next Activity

- Click on back button until you see the heading Numeracy – **Data Analysis – Level 1.**
- Click on **Next.**
- Choose 8421 - **Chainsaw & Skidder Operators – Log Lengths.**
- Check out a Real Workplace Activity Set.
- Select **On-line version** and click on continue.
- Submit answer.
- Finish Now.
- Enter your information.
- Click on **next** to review your result.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Making Change using Play Money</b>
Purpose:	Making Change
Materials Required:	Play Money using the Canadian Currency Exchange Game.
Time Allotted:	30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by reviewing the making change calculations.</li><li>2. Have the students complete the activities or allow the students to come up with some of their own.</li></ol>

## **PRACTITIONER PAGE**

### **HANDS ON ACTIVITY**

Using play money, have students pair up and practice making change.

#### **Activities to Complete:**

1. Ask the students how many ways they could break a \$10.00 bill into smaller pieces...  
They could use two \$5.00, or five toonies, ten loonies, etc. Continue with any other denomination.
2. Create a store and have the students count back change for items purchased. The students could be the cashier and then the customer.
3. Make up an invoice on a whiteboard or chalkboard. Have the students calculate the amount owing and then calculate the change to be given back and outlining the denominations.

## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Completing a Cover Letter</b>
Purpose:	To write and complete a cover letter for possible employment opportunities.
Materials Required:	The computer
Time Allotted:	15 - 30 minutes
Activity:	<ol style="list-style-type: none"><li>1. Begin this activity by going to The Learning Edge Website.</li><li>2. Have the students complete the cover letter activity.</li><li>3. Begin this activity today and complete it in the last class.</li></ol>

## WRITING A COVER LETTER

Our next computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 3**
- Click on **How to Write A Good Cover Letter**
- Complete the Activity

This activity will be started in this class and completed in the last class along with a resume.

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

- Click on [www.learninghub.ca/](http://www.learninghub.ca/)
- Click on **#2 – Get Registered**.
- The **NEW LEARNER** Registration form will appear.
- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course **“INDEPENDENT STUDY”**.
- Click on **SUBMIT**.

## **PRACTITIONER PAGE**

### **HOMEWORK FOR CLASS SEVENTEEN**

We will be finishing up our cover letters and writing resumes for tomorrow's class. Have the students bring up to date information for completing a resume. If they already have a resume, have them bring it with them.

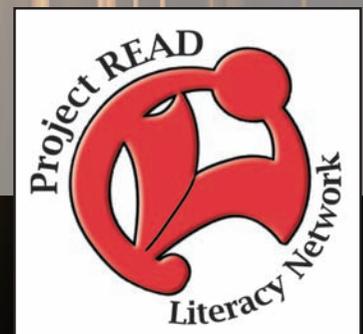
Many computer activities in this lesson have been included in this lesson. The timing of the class will not permit the students to complete all of them. Please make sure the students are given a copy of all of these activities to complete at home to reinforce the numeracy skills.





# CLASS EIGHTEEN

Writing A  
Cover Letter &  
Preparing  
a Resume



## PREPARATION PAGE FOR THE PRACTITIONER

Activity Name:	<b>Writing A Resume</b>
Purpose:	To leave this class with a resume for use in job searching.
Materials Required:	Take a look at <a href="http://www.servicecanada.gc.ca">www.servicecanada.gc.ca</a> to determine which resume you would like your students to complete. The instructions are on page 18-3.
Time Allotted:	1 ½ to 2 hours
Activity:	<ol style="list-style-type: none"><li>1. After the students have completed a cover letter, have the students proceed to the computer and read the information about resume writing on the Service Canada website.</li><li>2. Using the information the students have brought from home, have the students complete a resume.</li></ol>

## CLASS NUMBER 18

In this class we are going to continue working on our cover letter from Class 17 and write a resume.

After you have completed the Cover Letter Activity found on The Learning Edge website, you may proceed to the next website:

- From the Google homepage enter: [www.servicecanada.gc.ca](http://www.servicecanada.gc.ca)
- Select Bienvenue a Service Canada/Welcome to Service Canada
- Choose English
- On the left hand column, double click on [Publications and Reports](#)
- Select [Service Canada Publications](#)
- Under Service Canada Publications, click on [Youth Resources](#)
- Under [Youth Resources](#), click on [Looking For A Job](#)
- Scroll down to [Section 4 – Prepare Your Marketing Tools to Help Sell Yourself](#)
- Read the information until you reach [Three Main Types of Resumes](#)
- Click on [Chronological](#), then on [Functional](#), and finally on [Combination](#) to determine which resume suits you best.

The next computer activity is found on The Learning Edge website.

- From the Google homepage, type **The Learning Edge**
- Select The Learning Edge at [www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)
- Click on **Issue 7**.
- Click on **What Does It Take To Stay Employed?**
- Complete the Activity.

If time permits, have the students go to a website to look at the volunteer job opportunities in your community. This is a great way to add skills to your resume and make you more employable in the job market!

The website for the Kitchener Waterloo Volunteer Action Centre is [www.volunteerkw.ca](http://www.volunteerkw.ca). To find a website in your area, complete an internet search for volunteering in your particular area of Ontario.

For example, the website for the Arthur area is [www.canadian-universities.net/Volunteer/Ontario-Fergus](http://www.canadian-universities.net/Volunteer/Ontario-Fergus)

For example, the website for the Guelph area is [www.volunteerguelphwellington.on.ca](http://www.volunteerguelphwellington.on.ca)

## REGISTRATION INSTRUCTIONS FOR THE LEARNING HUB

Additional activities are found on [www.learninghub.ca/](http://www.learninghub.ca/)  
In order to access this website, we need to register.

**Important Information:** Before we register for this on-line learning website, every learner must have an **e-mail account**. I would suggest using G-Mail since it is the easiest application to complete.

From the Google homepage, type in The Learning Hub.

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- Click on **#2 – Get Registered**.
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- Complete the **NEW LEARNER** Registration form – Page 1.

Enter your personal data into the fields. To move down the page, press the tab key.

- On the registration form, when asked “What you would like to improve?” indicate **MATH**.
- On the registration form, when asked “How would you like to learn?” indicate **INDEPENDENT STUDY (AVAILABLE 24 HOURS/DAY, 7 DAYS/WEEK)**.
- In the **OTHER COMMENTS** Box, specify that you are working on the **Adding To My Skills** curriculum.
- Click on **NEXT**.
- On page 2 under **MATH**, add the course “**INDEPENDENT STUDY**”.
- Click on **SUBMIT**.

# NATIONAL OCCUPATIONAL CODES SKILL LEVEL C

**Skill Level C Occupations usually require secondary school and/or occupation specific training**

**Follow the link to the description of the specific occupations for both C and D Level codes within the National Occupational Codes and Essential Skills Profiles, respectively:**

<http://www5.hrsdc.gc.ca/NOC/English/NOC/2006/Welcome.aspx> (go to the bottom left corner of the page to enter in the NOC Code)

[http://www10.hrsdc.gc.ca/es/English/search\\_occupation\\_noc.aspx](http://www10.hrsdc.gc.ca/es/English/search_occupation_noc.aspx).

## Major Group 14

### **Clerical Occupations**

- 1411 General Office Clerks
- 1413 Records Management and Filing Clerks
- 1414 Receptionist and Switchboard Operators
- 1422 Data Entry Clerks
- 1423 Desktop Publishing Operators and Related Occupations
- 1424 Telephone Operators
- 1431 Accounting and Related Clerks
- 1432 Payroll Clerks
- 1433 Customer Service Representatives - Financial Services
- 1434 Banking, Insurance and Other Financial Clerks
- 1435 Collectors
- 1441 Administrative Clerks
- 1442 Personnel Clerks
- 1443 Court Clerks
- 1451 Library Clerks
- 1452 Correspondence, Publication and Related Clerks
- 1453 Customer Service, Information and Related Clerks
- 1454 Survey Interviewers and Statistical Clerks
- 1461 Mail, Postal and Related Clerks
- 1462 Letter Carriers
- 1463 Couriers, Messengers and Door-to-Door Distributors
- 1471 Shippers and Receivers
- 1472 Storekeepers and Parts Clerks
- 1472b Automotive Partspersons
- 1473 Production Clerks
- 1474 Purchasing and Inventory Clerks
- 1475 Dispatchers and Radio Operators
- 1476 Transportation Route and Crew Schedulers

## Major Group 34

### **Assisting Occupations in Support of Health Services**

3411 Dental Assistants

3413 Nurse Aides, Orderlies and Patient Service Associates

3414 Other Assisting Occupations in Support of Health Services

3414b Other Assisting Occupations in Support of Health Services

4214 Early Childhood Educator Assistants –Skill Level B(may require college education or apprenticeship training)

## Major Group 64

### **Intermediate Sales & Service Occupations**

6411 Sales Representatives - Wholesale Trade (Non-Technical)

6421 Retail Sales Associates

6431 Travel Counsellors

6432 Purser and Flight Attendants

6433 Airline Sales and Service Agents

6434 Ticket and Cargo Agents and Related Clerks (Except Airline)

6435 Hotel Front Desk Clerks

6441a Local Tour Guides

6441b Tour Directors

6442a Freshwater Angling Guides

6442b Hunting Guides

6443 Casino Occupations

6451 Maitres d'hôtel and Hosts/Hostesses

6452 Bartenders

6453 Food and Beverage Servers

6461 Sheriffs and Bailiffs

6462 Correctional Service Officers

6463 By-Law Enforcement and Other Regulatory Officers

6465 Other Protective Service Occupations

6471 Visiting Homemakers, Housekeepers and Related Occupations

6472 Elementary and Secondary School Teacher Assistants

6474 Babysitters, Nannies and Parents' Helpers

6481 Image, Social and Other Personal Consultants

6482 Estheticians, Electrologists and Related Occupations

6483 Pet Groomers and Animal Care Workers

## Major Group 74

### **Intermediate Occupations in Transport, Equipment Operation, Installation & Maintenance**

7411 Truck Drivers

7412 Bus Drivers, Subway Operators and Other Transit Operators

7413 Taxicab Drivers

7414 Delivery Drivers

## Major Group 74

### **Intermediate Occupations in Transport, Equipment Operation, Installation & Maintenance con't**

- 7414 Delivery Drivers
- 7421 Heavy Equipment Operators (Except Crane)
- 7422 Public Works Maintenance Equipment Operators
- 7431 Railway Yard Workers
- 7432 Railway Track Maintenance Workers
- 7433 Deck Crew, Water Transport
- 7434 Engine Room Crew, Water Transport
- 7435 Lock and Cable Ferry Operators and Related Occupations
- 7436 Boat Operators
- 7437 Air Transport Ramp Attendants
- 7441a Residential and Commercial Installers and Servicers
- 7441b Sign Service/Installation Technicians
- 7442 Waterworks and Gas Maintenance Workers
- 7443 Automotive Mechanical Installers and Servicers
- 7444 Pest Controllers and Fumigators
- 7445 Other Repairers and Servicers
- 7451 Longshore Workers
- 7452 Material Handlers

## Major Group 84

### **Intermediate Occupations in Primary Industry**

- 8411 Underground Mine Service and Support Workers
- 8412 Oil and Gas Well Drilling Workers and Services Operators
- 8421 Chainsaw and Skidder Operators
- 8422 Silviculture and Forestry Workers
- 8431 General Farm Workers
- 8432 Nursery and Greenhouse Workers
- 8441 Fishing Vessel Deckhands
- 8442 Trappers and Hunters

## Major Group 94/95

### **Processing & Manufacturing, Machine Operators & Assemblers**

- 9411 Machine Operators, Mineral and Metal Processing
- 9412 Foundry Workers
- 9413 Glass Forming and Finishing Machine Operators and Glass Cutters
- 9414 Concrete, Clay and Stone Forming Operators
- 9415 Inspectors and Testers, Mineral and Metal Processing
- 9421 Chemical Plant Machine Operators
- 9422 Plastics Processing Machine Operators
- 9423 Rubber Processing Machine Operators and Related Workers
- 9424 Water and Waste Plant Operators
- 9431 Sawmill Machine Operators

Major Group 94/95

**Processing & Manufacturing, Machine Operators & Assemblers con't**

- 9432 Pulp Mill Machine Operators
- 9433 Papermaking and Finishing Machine Operators
- 9434 Other Wood Processing Machine Operators
- 9435 Paper Converting Machine Operators
- 9436 Lumber Graders and Other Wood Processing Inspectors and Graders
- 9441 Textile Fibre and Yarn Preparation Machine Operators
- 9442 Weavers, Knitters and Other Fabric-Making Occupations
- 9443 Textile Dyeing and Finishing Machine Operators
- 9444 Textile Inspectors, Graders and Samplers
- 9451 Sewing Machine Operators
- 9452 Fabric, Fur and Leather Cutters
- 9453 Hide and Pelt Processing Workers
- 9454 Inspectors and Testers: Fabric, Fur and Leather Manufacturing
- 9461 Process Control and Machine Operators, Food and Beverage Processing
- 9462 Industrial Butchers and Meat Cutters, Poultry Preparers and Related Workers
- 9463 Fish Plant Workers
- 9464 Tobacco Processing Machine Operators
- 9465 Testers and Graders, Food and Beverage Processing
- 9471 Printing Machine Operators
- 9472 Camera, Platemaking and Other Pre-Press Occupations
- 9473 Binding and Finishing Machine Operators
- 9474 Photographic and Film Processors
- 9481 Aircraft Assemblers and Aircraft Assembly Inspectors
- 9482 Motor Vehicle Assemblers, Inspectors and Testers
- 9483 Electronic Assemblers, Fabricators, Inspectors and Testers
- 9484b Assemblers and Inspectors, Electrical Appliance, Apparatus and Equipment Manufacturing
- 9485 Assemblers, Fabricators and Inspectors, Industrial Electrical Motors and Transformers
- 9486 Mechanical Assemblers and Inspectors
- 9487 Machine Operators and Inspectors, Electrical Apparatus Manufacturing
- 9491 Boat Assemblers and Inspectors
- 9492 Furniture and Fixture Assemblers and Inspectors
- 9493 Other Wood Products Assemblers and Inspectors
- 9494 Furniture Finishers and Refinishers
- 9495 Plastic Products Assemblers, Finishers and Inspectors
- 9496 Painters and Coaters - Industrial
- 9497 Plating, Metal Spraying and Related Operators
- 9498a Signmakers
- 9498b Other Assemblers and Inspectors
- 9511 Machining Tool Operators
- 9512 Forging Machine Operators
- 9513 Woodworking Machine Operators
- 9514 Metalworking Machine Operators
- 9516 Other Metal Products Machine Operators
- 9517 Other Products Machine Operators

# NATIONAL OCCUPATIONAL CODES SKILL LEVEL D

**Skill Level D occupations usually provide on-the-job training.**

## Major Group 66

### **Elemental Sales & Service Occupations**

- 6611 Cashiers
- 6621 Service Station Attendants
- 6622 Grocery Clerks and Store Shelf Stockers
- 6623 Other Elemental Sales Occupations
- 6631 Elemental Medical and Hospital Assistants
- 6641 Kitchen Helpers and Line Cooks
- 6651 Security Guards and Related Occupations
- 6661 Light Duty Cleaners
- 6662 Specialized Cleaners
- 6663 Janitors, Caretakers and Building Superintendents
- 6671 Operators and Attendants in Amusement, Recreation and Sport
- 6681 Dry Cleaning and Laundry Occupations
- 6682 Ironing, Pressing and Finishing Occupations
- 6683 Other Elemental Service Occupations

## Major Group 76

### **Trades Helpers, Construction Labourers and Related Occupations**

- 7611 Construction Trades Helpers and Labourers
- 7612 Other Trades Helpers and Labourers
- 7621 Public Works and Maintenance Labourers
- 7622 Railway and Motor Transport Labourers

## Major Group 86

### **Labourers In Primary Industry**

- 8611 Harvesting Labourers
- 8612 Landscaping and Grounds Maintenance Labourers
- 8613 Aquaculture and Marine Harvest Labourers
- 8614 Mine Labourers
- 8615 Oil and Gas Drilling, Servicing and Related Labourers
- 8616 Logging and Forestry Labourers

Major Group 96

**Labourers in Processing, Manufacturing & Utilities**

**9611** Labourers in Mineral and Metal Processing

**9612** Labourers in Metal Fabrication

**9613** Labourers in Chemical Products Processing and Utilities

**9614** Labourers in Wood, Pulp and Paper Processing

**9615** Labourers in Rubber and Plastic Products Manufacturing

**9616** Labourers in Textile Processing

**9617** Labourers in Food, Beverage and Tobacco Processing

**9618** Labourers in Fish Processing

**9619** Other Labourers in Processing, Manufacturing and Utilities

## BIBLIOGRAPHY BOOKS

- Ciancone, Tom. (1988). *A Report to the Adult Basic Education Unit*. Board of Education. Toronto.
- Crowell, Caleb E. (1990). *Math: For the World of Work*. Educational Design Inc. New York.
- Employment Ontario. (March 2010) *Workforce Focus – from the Workforce Planning Board of Waterloo Wellington Dufferin. Volume 5, Issue 6*.
- Geraci, Karen. (2002). *Workwrite – Workplace Communications*. Preparatory Training Programs. Toronto.
- Geraci, Karen. Popovic, Aleksandra. (2008). *Workwrite Series – Organizing Information, Schedules, Information Forms, Books 1,2,and 3*. Grass Roots Press. Toronto.
- Geraci, Karen. Mazzulla, Marisa. (2007). *Workforce Literacy and Essential Skills Instructional Guidelines – Signposts – CAMERA System*. PTP. Toronto
- Goodall, Jonathan. (1998). *The Classic Bar & Cocktail Book*. Quintet Publishing Limited. London.
- Kennell, Trudy. (2004). *Skills at Work Series – Workbook 2 – A Day on the Job. Practitioner Guide to Workbooks 1 & 2*. Centre AlphaPlus Centre. Toronto.
- Lassiter, Karen. (1997). *Math Skills for the Workforce – Decimals and Percents*. Steck-Vaughn, Austin, Texas.
- Lassiter, Karen. (1997). *Math Skills for the Workforce – Measurement, Geometry, and Algebra*. Steck-Vaughn, Austin, Texas.

Lassiter, Karen. (1997). *Math Skills for the Workforce – Whole Numbers*. Steck-Vaughn, Austin, Texas.

Mosenfelder, Donn. (1991). *Life Skills Math*. Educational Design Inc. New York.

Mosenfelder, Donn. (1993). *Life Skills Math 2 Exercise Supplement*. Educational Design Inc. New York.

Nelson Education. *Math for Everyday Life*.

Ontario Literacy Coalition. *Numeracy – Best Practice & Innovation*.

The Best of Bridge Publishing Company. (1992). *Aces – More Recipes From the Best of Bridge*. The Best of Bridge Publishing Limited. Calgary

## BIBLIOGRAPHY WEBSITES

[www.tylenol.com](http://www.tylenol.com)

[www.purina.ca](http://www.purina.ca)

[www.healthyeatingpei.ca](http://www.healthyeatingpei.ca)

[www.nelson.com/math](http://www.nelson.com/math)

[www.hrsdc.gc.ca](http://www.hrsdc.gc.ca)

[www.nald.ca/library/research/levels/levels.pdf](http://www.nald.ca/library/research/levels/levels.pdf)

[www.GCFLearnFree.org](http://www.GCFLearnFree.org)

[www.mathplayground.com](http://www.mathplayground.com)

[www.selloffvacations.com](http://www.selloffvacations.com)

[www.funbrain.com](http://www.funbrain.com)

[www.onlinemathlearning.com](http://www.onlinemathlearning.com)

[www.skills.edu.gov.on.ca/](http://www.skills.edu.gov.on.ca/)

[www.Thewclc.ca/edge/](http://www.Thewclc.ca/edge/)

[www.servicecanada.gc.ca](http://www.servicecanada.gc.ca)

