

CURRICULUM RESOURCE

Digital Tools for Apprenticeship: AR Ruler for iPhone and Android

OALCF ALIGNMENT

Competency	Task Group	Level
Competency A - Find and Use Information	A1. Read continuous text	2
Competency A - Find and Use Information	A2. Interpret documents	2
Competency B - Communicate Ideas and Information	B3. Complete and create documents	2
Competency C - Understand and Use Numbers	C3. Use measures	2
Competency D - Use Digital Technology	N/A	1

Goal Paths (check all that apply)

- Employment
- Apprenticeship
- Secondary School Credit
- Postsecondary
- Independence

Embedded Skills for Success (check all that apply)

- Adaptability
- Collaboration
- Communication
- Creativity and innovation
- Digital
- Numeracy
- Problem Solving
- Reading
- Writing

NOTES: Part two of a six-part series on basic workplace and apprenticeship digital tools.

ACKNOWLEDGEMENTS

Project Host: Community Literacy of Ontario

Research & Writing: Mark Jacquemain



This Employment Ontario service is funded in part by the Government of Canada and the Government of Ontario through the Canada-Ontario Job Fund Agreement.



The opinions expressed in this report are the opinions of Community Literacy of Ontario and do not necessarily reflect those of our funders.

 communityliteracyofontario.ca

 (705) 733-2312

 info@communityliteracyofontario.ca

 @CommunityLiteracyOntario

 @love4literacy

 @love4literacy

DIGITAL TOOLS

FOR WORKPLACE AND APPRENTICESHIP BASICS

Note for practitioners:

This series of **Skills for Success Curriculum Resources** is a beginner's guide to the certain handy digital tools for use in the workplace or on apprenticeships. The goal is to provide basics tools to employed learners, or learners seeking employment, so that they can thrive as employees.

This series looks at a range of apps, from imperial-to-metric conversion apps guides to measurement and business basics apps. The goal of the series is to give employees an expanded digital toolkit for use on the job.

These resources are learner-based and activity-focused, with each topic area serving as a walk-through of the information or technology, followed by personalized activities. The activities invite learners to respond to lesson material or explore their own ideas on the subject.

The series is divided into six sections that can be used separately or in tandem:

- Metric Conversions (for iPhone and Android)
- AR Ruler (for iPhone and Android)
- Laser Level (for iPhone and Android)
- Tradify (for iPhone and Android)
- Share My Toolbox (for iPhone and Android)
- St. John Ambulance (for iPhone and Android)

DIGITAL TOOLS: AR Ruler

TABLE OF CONTENTS

Overview	4
Pro and Cons	5
Downloading for iPhone	7
Downloading for Android	9
Using AR Ruler	11
Special Features	19
Skills for Success	23

This is Section Two: AR Ruler for iPhone and Android

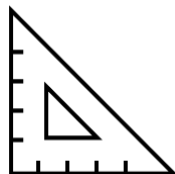
Overview

AR Ruler Overview

The most accurate tool for measuring at the workplace is your measuring tape. But digital measuring tools can provide close estimates of objects and areas that need to be measured. They also may provide extra features like:

- measuring angles
- determining if surfaces are level
- calculating a measured area
- measuring height
- measuring diameter or radius of circles

The calculations done by digital measuring apps can also reduce on the job mistakes. And ruler apps are very useful when drawing shapes or rooms. Measuring apps allow you to measure objects or areas in three dimensions. This means measuring shapes like cubes or measuring the length, width, and height of a room.



The AR Ruler app uses your smartphone's camera to measure real-world objects. It measures in different units like metres, feet, and others. It is great for estimation of distances and object size. And for measuring height and angles.

Pro and Cons

AR Ruler Pros and Cons

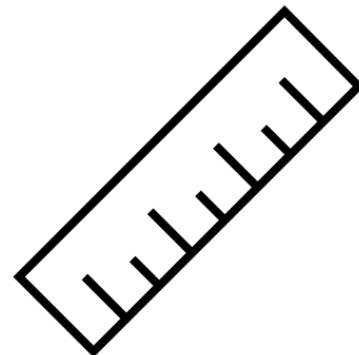
Some benefits to the AR Ruler app:

- free
- simple features and easy to use
- one of the most accurate digital measuring apps

Some drawbacks:

- it will frequently ask you to upgrade to the pro version at a cost (tap the x in the top right corner to skip past)
- some features like making a room plan are only available if you upgrade
- getting the most accurate results takes some practice

The AR Ruler app is not meant to replace your measuring tape. But it is a simple to use alternative to help you on the job.



Measurements at Work and in Life

When do you need to use measurement? There are many examples:

- A cabinetmaker is fitting a cabinet below a sink.
- A plumber is affixing a length of piping behind a water heater.
- A warehouse worker is determining how many boxes can be added to shelves.
- A contractor is measuring the area of a room or building.



Let's discuss!

What is **your** experience?

1. Are you at a job where you have to do measurements? Yes No

2. If so, which job?

3. What are some measurements you've done before? Check all that apply:

Measurements for trades work like carpentry or plumbing?

Measurements around your home to space furniture or do repairs?

Measurements of your own body?

Downloading for iPhone

AR Ruler App

Now we will get started using the AR Ruler app for iPhone or Android smartphones. This app is a quick and fairly accurate way to perform measurements of all kinds. But first we need to download the app onto the phone.

1. Getting AR Ruler for iPhone

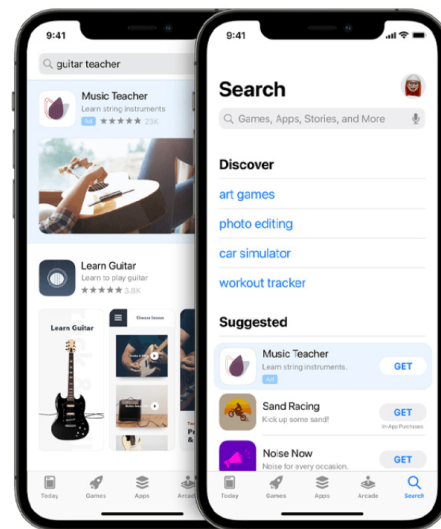
If you have an **iPhone**, start here. (If you have an Android, skip to section 2.)



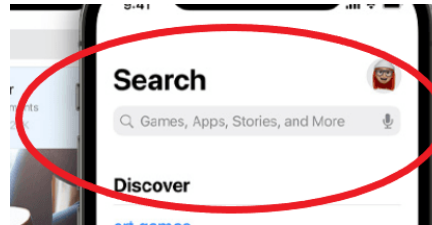
Tap the App Store icon:



The App Store looks like this:



Type in the search bar:
AR Ruler



Find the correct app. You may have to scroll down a little. Its icon looks like this:



Tap **GET**.



New Task!

Download the app.



- Follow the steps above and download the app.
- Make sure the icon appears on your phone.
- Once it's downloaded, skip ahead to section 3 and we will try it out!

Downloading for Android

2. Getting AR Ruler for Android

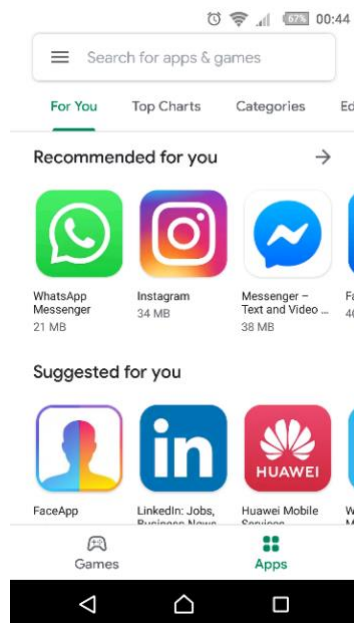
If you have an **Android**, start here. (If you have an iPhone, skip to section 3.)



Tap the Google Play icon:

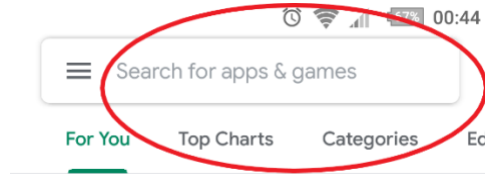


The Google Play store looks like this:



Type in the search bar:

AR Ruler



Find the correct app. You may have to scroll down a little.
Its icon looks like this:



Tap **GET**.



New Task!

Download the app.

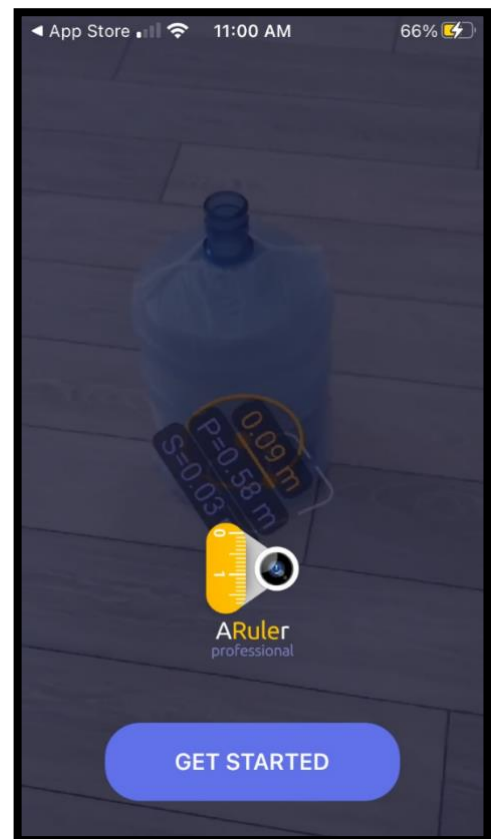
- Follow the steps above and download the app.
- Make sure the icon appears on your phone.
- Once it's downloaded, skip ahead to section three and we will try it out!

Using AR Ruler

3. Using AR Ruler

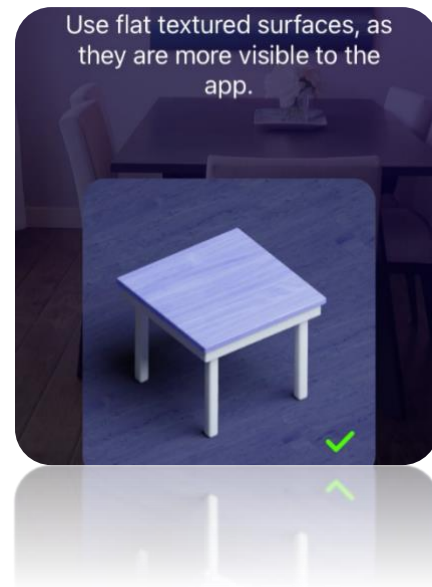
The AR Ruler home screen looks like this:

Tap **GET STARTED**.



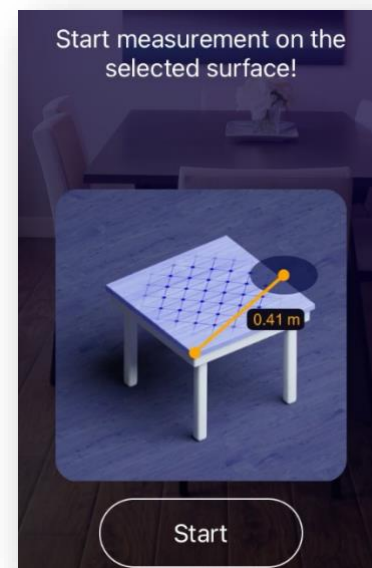
You will be asked to choose units (choose whatever you like). Then you will be given some instructions to help you use the app:

- use in good lighting
- use on flat surfaces
- aim your phone at the selected surface

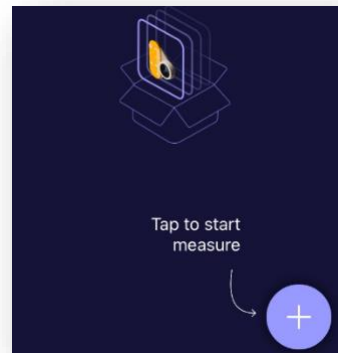


Finally, you will be asked to start measuring.

This is what it looks like the first time you use the app:



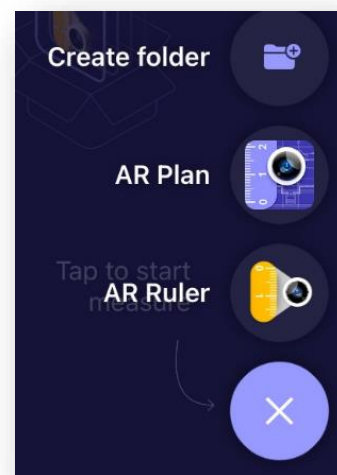
After the first time, you won't see the instructions again. From then on, after you tap GET STARTED, you will come to this screen:



Then you will come to this screen:
Tap AR Ruler to begin.



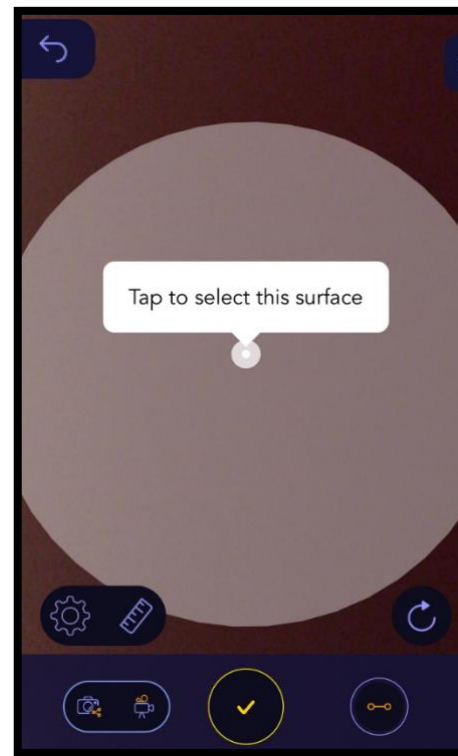
New Task!
Get started.



- Find an area with good lighting.
- Choose a surface area to measure like a table or countertop.
- Tap Start.
- The app will ask to access your smartphone's camera. Tap OK.
- The app will ask you to move your phone around. Hold your phone over the surface you have chosen and move it.

You should arrive at a screen that looks like this:

Tap to measure the surface you've chosen.



To begin measuring, the circle in the middle of your phone must be aimed at the first point in the measurement:



When it's lined up, you will click the yellow checkmark in the bottom of the screen:



Then the circle must be aimed at the second point in the measurement. Tap the checkmark and you will see the measurement amount:



Now you try it.

Do your own measurement on the app.

First, choose a **type** of surface. You could measure a desk, an area of the floor, or any flat surface.

What did you choose?

Next:

- Line up the circle in the middle of your phone with the first point in the measurement.
- Click the yellow checkmark.
- Line up the circle with the second point in the measurement.
- Click the yellow checkmark.

What measurement did you get?



New Task!

Test it Out.

Once you've tried the app a few times, try to test its accuracy.

You will need a **measuring tape** to do this.

1. Follow the steps above and measure the distance between two points.

What measurement did you get?

2. Now do the same measurement again using the measuring tape.

What measurement did you get?

3. Were the measurements close? Yes No

If the measurements were off, you may need to try again. The more you practice, the more accurate you will be with the app.

4. Make a few more measurements with the app and the tape. Compare the results below:

What measurement did you get with the app? And with the measuring tape?

What measurement did you get with the app?

And with the measuring tape?

What measurement did you get with the app?

And with the measuring tape?

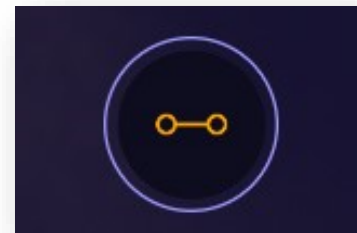
5. Which measuring tool did you prefer using? Why?

Special Features

Beyond the measuring tool, AR Ruler has a few special features. Not all the extras on the app will be useful to you. But below is a list of some key features that will make using AR Ruler easier and more complete:

1. Extra Measurement Tools

Tap the circle in the lower right corner:



It will open up other measurement options, such as height, angles, and more:



New Task!
Try it Out.

Try measuring the height of something.

What did you choose to measure?

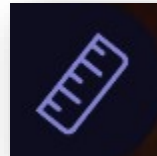
How tall is it in centimetres?



2. The Built-In Ruler


The app has a small built-in ruler that stretches the length and width of the phone.

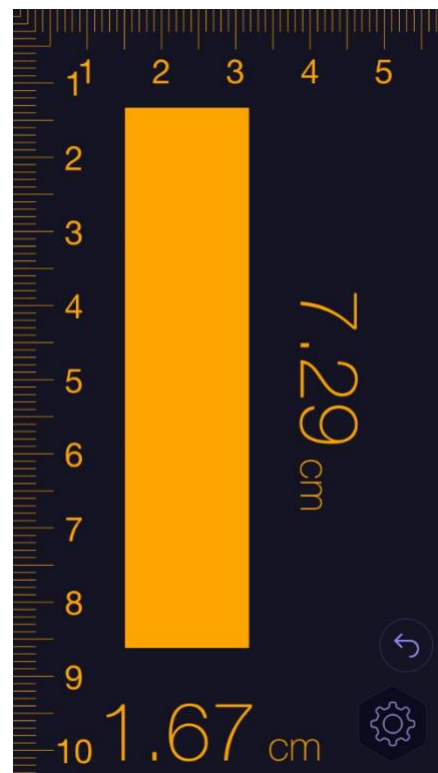
Tap the ruler icon on the bottom left:

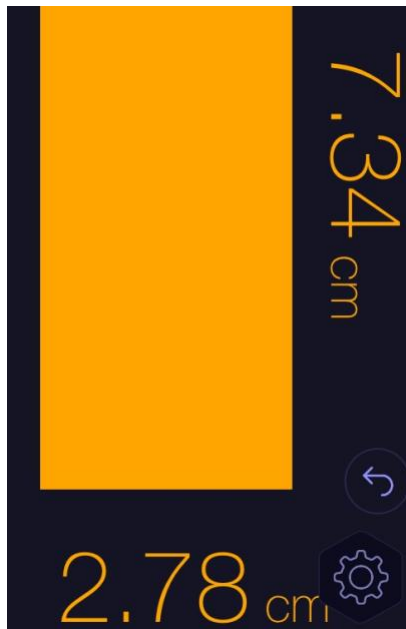


It will open the ruler:

Try it out.

By swiping  at the edges of the ruler you can change the length or the width:



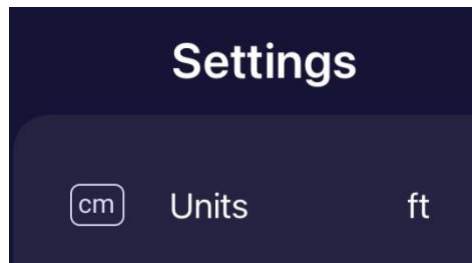


3. Changing Units

Tap the gear wheel icon on the bottom left:



It will open the settings. You will be able to change the measurement units:



4. New Surface Button

Tapping this icon will allow you to change the surface you are measuring:



5. The Redo Button

Tapping this button will allow you to start your measurement over:



Skills for Success

The **Skills for Success** (SFS) are the everyday skills Canadians need for work, learning and life. Several SFS are required for you to be successful using the AR Ruler app:

- **Numeracy.** Numbers skills are essential when doing measurements. They become even more important as you change measurement units.
- **Digital.** The AR Ruler app requires flexing your basic digital skills. You will need the digital skills to download and navigate the app.
- **Problem Solving.** Working with different measurement systems requires some problem solving. Identify the problem. Then think about it carefully. Then work toward a solution.
- **Creativity and Innovation.** Sometimes applying technology to on the job or apprenticeship problems is a way to show creativity and innovation. Keep learning new tools!

Learn more about the Skills for Success here:

<https://www.canada.ca/en/services/jobs/training/initiatives/skills-success.html>

- Also see the other resources in this series: **Digital Tools for Workplace and Apprenticeship Basic Skills**