



4th  
Basic

5th  
Advanced

# Helping With Math

USA  
GRADES

## Conversion of Like Units (Measures of Length)

*Suitable for students  
aged 8-10*



This pack is suitable for learners aged 8-10 years old or 4th to 5th graders (USA). The content covers fact files and relevant basic and advanced activities involving conversion of like units (measures of length).

**Length** is used for identifying the size or measurement of an object or distance from one point to another.



These are some of the tools used to measure length.



Meter stick

Ruler



Tape  
measure



Length is a measure of how long a certain object is. In addition, it also measures the distance between two points.



# METRIC UNITS OF LENGTH

Measuring length are in the form of metric units and customary units.

## METRIC UNITS OF LENGTH

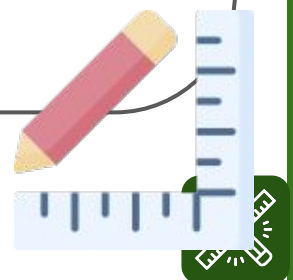
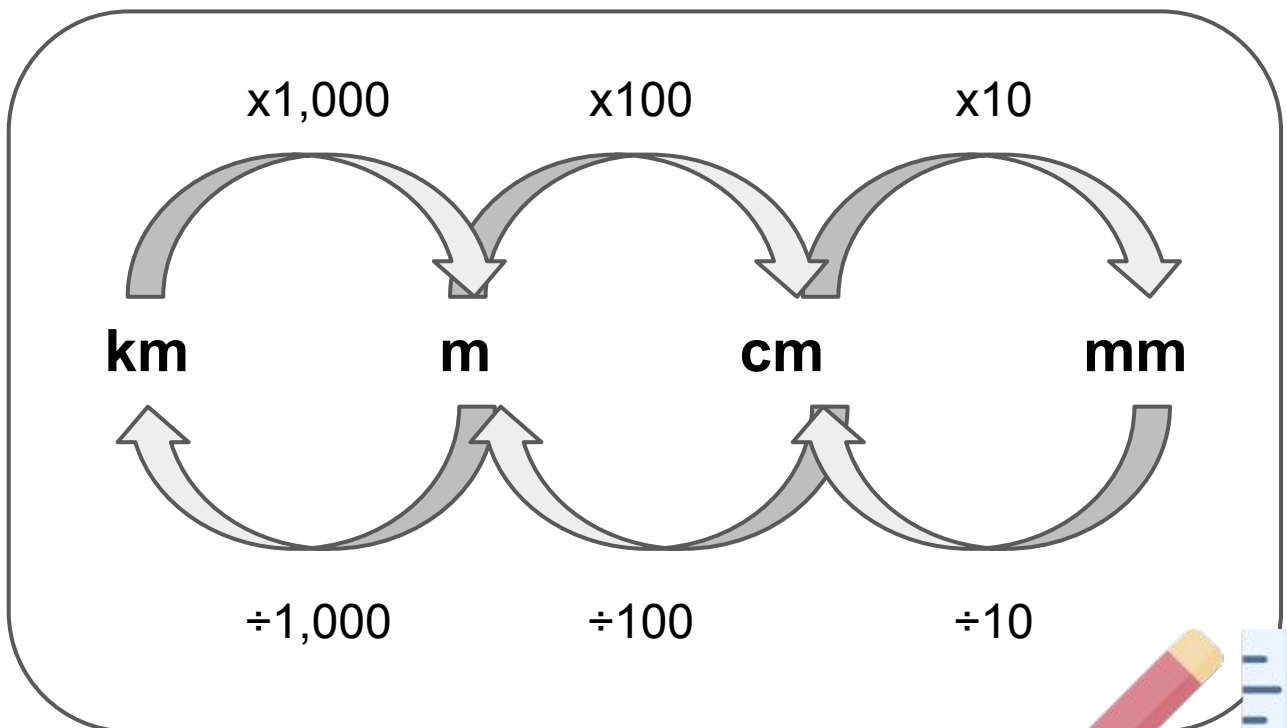


- The standard unit in this kind of system is meter (m)
- Meter can be converted into different units like millimeters (mm), centimeter (cm), and kilometer (km)

Centimeters and Millimeters are used to measure smaller lengths.



Meters and Kilometers are used to measure larger lengths like distance.

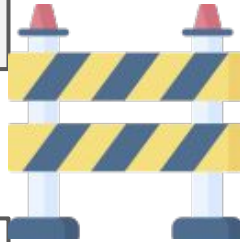


## ILLUSTRATIVE EXAMPLES

Examples:

How many cm are there  
in 2.5 km?

1 km = 100,000 cm  
Thus, 2.5 km is equal to  
250, 000 cm.



Try these:

0.65 m = \_\_\_\_\_ cm

16 km = \_\_\_\_\_ m



### CUSTOMARY UNITS OF LENGTH

- This kind of measurement of length is commonly used in the United States
- Units in this system include the inches, feet, yards, and miles.

#### Inches

- small unit of measurement.
- 1 inch = 2.54 cm

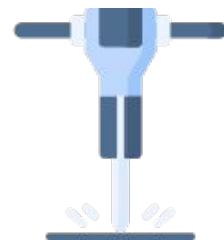


#### Feet

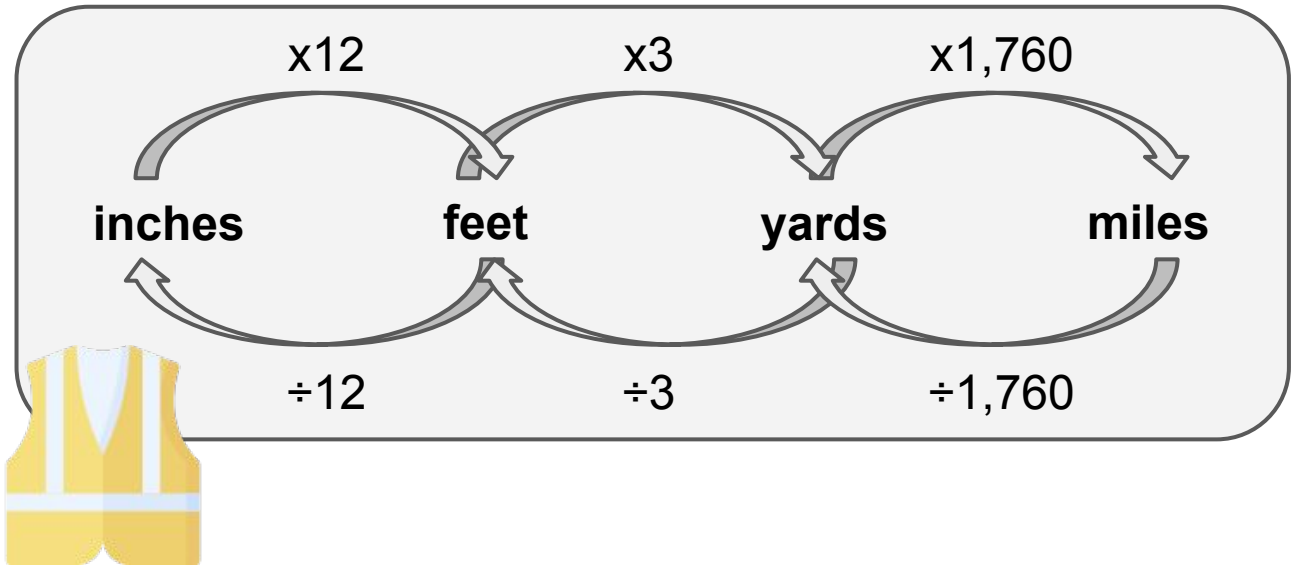
- 1 foot = 12 inches
- 1 foot = 30.48 centimeters

#### Yard

- 1 yard = 3 feet
- 1 yard = 36 inches



## PRACTICE EXERCISES



Examples:

How many feet are there in 35 yards?

1 yard = 3 feet  
So,  $35 \times 3 = 105$  feet.

Try these:

How many miles are there in 2500 feet?



# TABLE OF ACTIVITIES

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# GUESS WHO

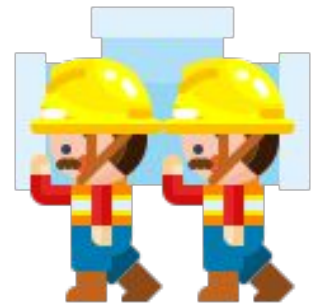
G4  
Basic

Show your appreciation to these hardworking laborers by identifying what is being described in each item.



1. This kind of measurement belongs to the customary units and when converted to cm, the answer will be 30.48. What am I?

2. We belong to the metric units of length and we are classified and used to measure smaller objects or lengths. What are we?



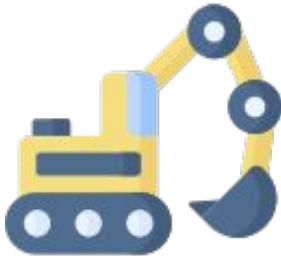
3. I am the kind of measurement who belongs with the customary units family that results to 3 feet, as well as 36 inches when converted. What am I?



# CONSTRUCTION TOOLS AND MACHINES

G4  
Basic

Analyze the following objects if you should measure it by feet, yards, or inches. Write your answer on the space provided.



1. Excavator

\_\_\_\_\_



2. Safety Glasses

\_\_\_\_\_



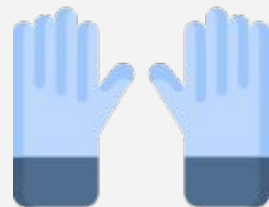
3. Crane

\_\_\_\_\_



4. Sewing Machine

\_\_\_\_\_



5. Gloves

\_\_\_\_\_



# CONES AND MORE

G4  
Basic

Look at these cones and other labor tools. Which unit of measurement is the most appropriate to use in order to measure its length?

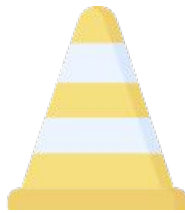
Building



INCHES  
FEET  
YARD

1.

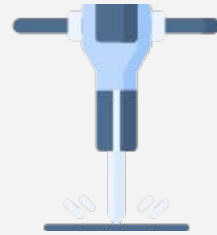
Traffic Cone



INCHES  
FEET  
YARD

2.

Jackhammer



INCHES  
FEET  
YARD

3.



Wheelbarrow



INCHES  
FEET  
YARD

4.

Clamp



INCHES  
FEET  
YARD

5.

Calendar



INCHES  
FEET  
YARD

6.



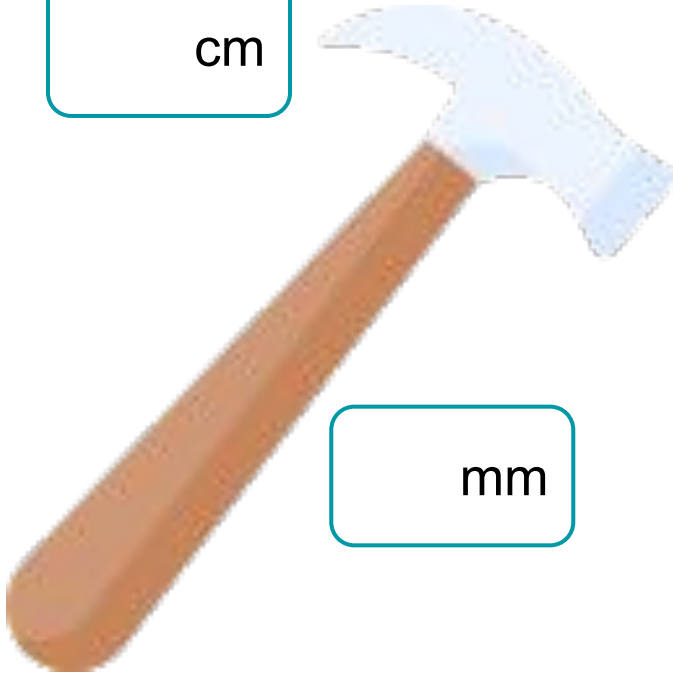


# LABORER FOR A DAY

G4  
Basic

Measure the following icon-tools in centimeters and millimeters.

cm

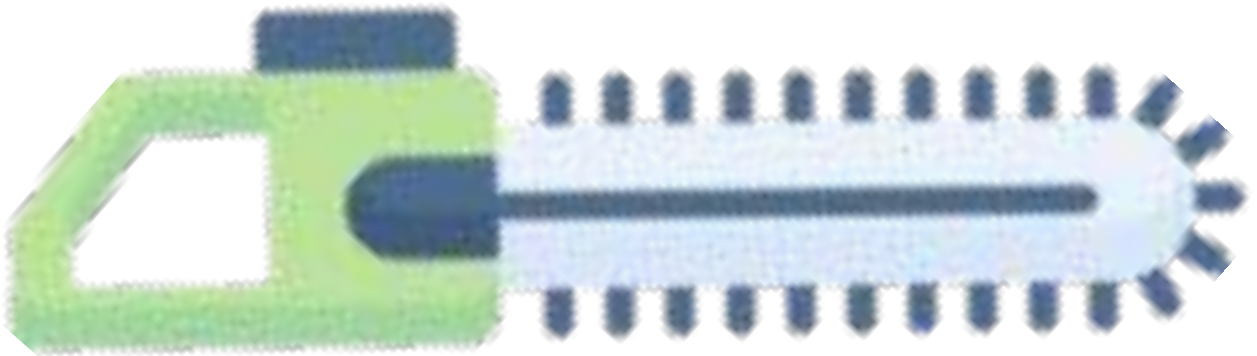


mm



cm

mm



cm

mm



# LABORER APPRECIATION DAY

G4  
Basic

Show our appreciation and respect to our great laborers by converting the following measurements. Show your solution.

1. 719 m = \_\_\_\_\_ cm

2. 84 cm = \_\_\_\_\_ mm

3. 50 m = \_\_\_\_\_ cm

4. 62 m = \_\_\_\_\_ mm

5. 29 m = \_\_\_\_\_ cm

6. 88 cm = \_\_\_\_\_ mm



Solution:



# LABOR TASK: TO MEASURE

G5  
Advanced

Draw a line segment for each measure

1. 156 cm

2. 29 m

3. 27 cm

4. 88 cm



# BE A LABORER FOR A DAY

G5  
Advanced

Be a laborer today! Accomplish your task by measuring the length of each line segment. Write your findings on the box.



1.

in



2.

in



3.

in



4.

in



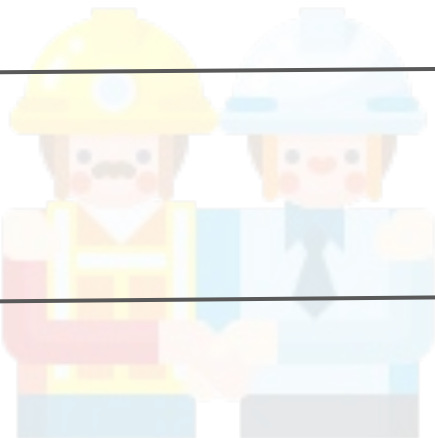
5.

in



6.

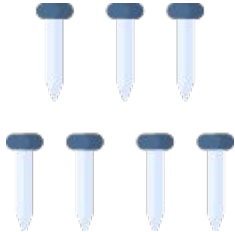


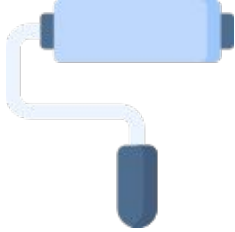
in



# TOOLS LIST

G5  
Advanced

Measure the size of the actual object shown below. Measure it in inches and centimeters

ITEM	INCHES	CENTIMETERS
		
		
		
		



# FINDERS KEEPERS

G5  
Advanced

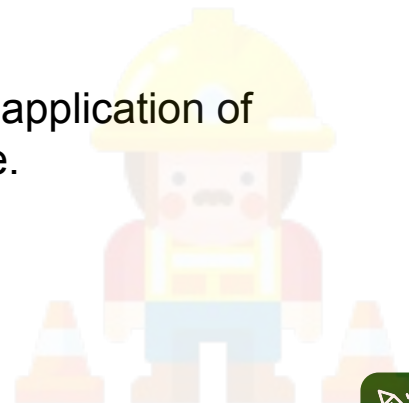
Find 10 tools in your house and get its measurement. Make sure to get their length accurately,

Name of the Object	Measurement (in inches)



**As you learned the lessons of this pack, appreciate its use in real-life by answering the following questions.**

1. Why do you think proper and accurate measurement is important in life?
2. What do you think will happen if we measure tools/objects incorrectly?
3. Into which common life scenarios you find conversion of measurement useful?
4. Share a personal experience about the application of conversion of measurements in your life.



# ANSWER GUIDE

## Activity 1

1. Feet
2. Centimeters and Millimeters
3. Yard

## Activity 2

1. Feet
2. Inches
3. Feet
4. Inches
5. Inches

## Activity 3

1. Yard
2. Inches
3. Inches
4. Inches
5. Inches
6. Inches

## Activity 5

1. 71,900
2. 840
3. 5,000
4. 6,200
5. 2,900
6. 880

## Activity 7

1. 2.1
2. 1.9
3. 2.3
4. 1.1
5. 1.5
6. 2.6

## Activity 4

1. 78 cm, 780 mm
2. 73 cm, 730 mm
3. 123 cm, 1,230 mm

## Activity 6

Answers may vary.

## Activity 8

Answers may vary.

## Activity 9

Answers may vary.

## Activity 10

Answers may vary.





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