



Helping With Math

Comparing Measurement Using the SI Unit



GRADE 2



Measurement is the size, length, or amount of something, as established by measuring. SI Units, also called as metric system, can be used for the measurement of *mass*, measurement of *volume* and measurement of *length*.



Units of Measurement

Measurement	SI Unit	Symbol
Length	Meter	m
Mass	Gram	g
Volume	Liter	L



Mass is a measurement of the amount of matter.



Length is the measure of an object from end to end.



Volume refers to the maximum amount that something can contain.



SI Unit Prefixes used in Measurement

To change the scale of the base units, prefixes are attached. A prefix represents a factor by which the base unit must be multiplied. Metric prefixes are listed below:

Prefixes	Symbol	Decimal Value
kilo	k	1000
hecto	h	100
deka	da	10
Base unit (no prefix)		1
deci	d	0.1
centi	c	0.01
milli	m	0.001

Measurement	Base Unit of Measurement
Length	meter
Mass	gram
Volume	liter



Comparing Measurement using SI Unit

We measure the mass of solid in grams or kilograms.



5 kg.



5 g.

REMEMBER THIS!

KILOGRAM is used to measure the weight or mass of heavier objects. While **GRAM** is used to measure the weight or mass of very light objects.
 $1,000\text{g} = 1\text{kg}$



We measure the volume in liters and milliliters.



1 L.

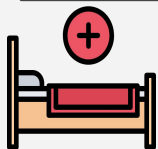


5 mL.

MILLILITER is a very small amount of liquid. While **LITER** is a bunch of millilitres put all together. In fact, 1000 milliliters makes up to 1 liter.
 $1,000\text{mL} = 1\text{L}$



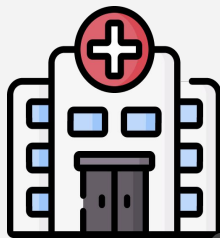
We measure the length in kilometres and meters. Long distances are measured in kilometers.



10 m.



5 km.



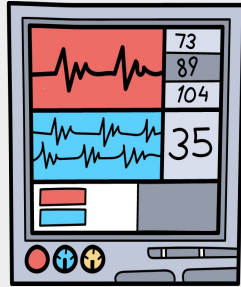
METER is the base unit for measuring length. **KILOMETERS** are 1,000 times larger than meter.
 $1,000\text{m} = 1\text{km}$



Identify the appropriate unit below



g



kg



mL



L

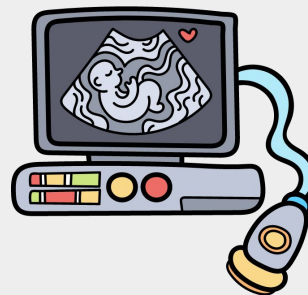
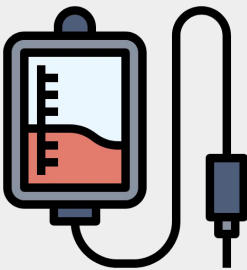
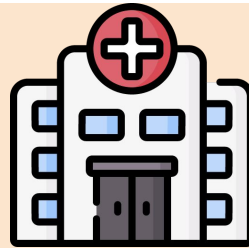
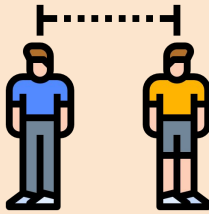


TABLE OF ACTIVITIES

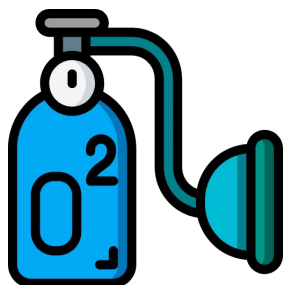
1. Am I long?
2. BINGO!
3. Weigh Me
4. Fill It
5. Which is which?
6. Cut it Out
7. Crack the Code
8. Healthier Together
9. Power of Ten
10. Doctor! Doctor!



AM I LONG?

The objects below are found in the hospital. Compare these hospital-related objects then cross-out the object which has longer measurement.

1



75 cm

OR



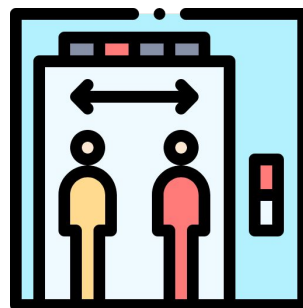
127 mm

2



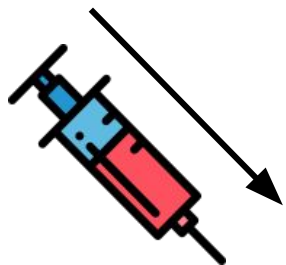
1 km

OR



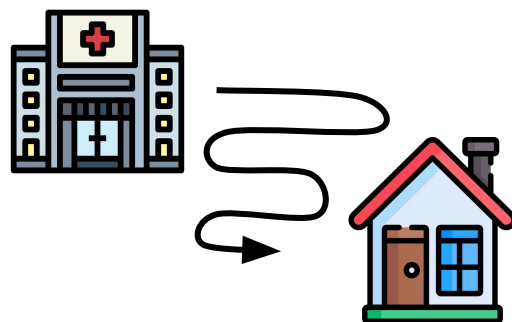
1 m

3



15 cm

OR



23 km



BINGO!

Encircle the most appropriate unit of measurement to describe the capacity of each medical supply for the hospital's inventory.



milliliters
(mL)

liters
(L)



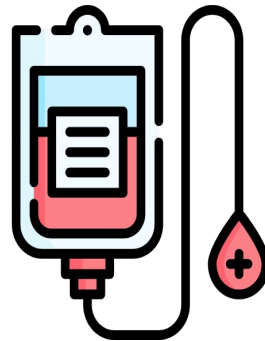
milliliters
(mL)

liters
(L)



milliliters
(mL)

liters
(L)



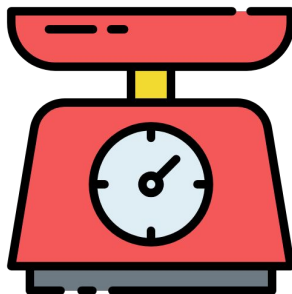
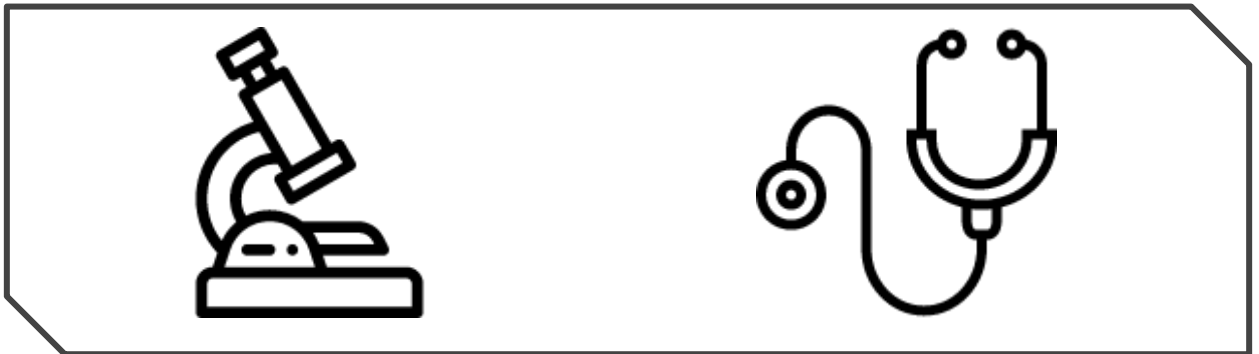
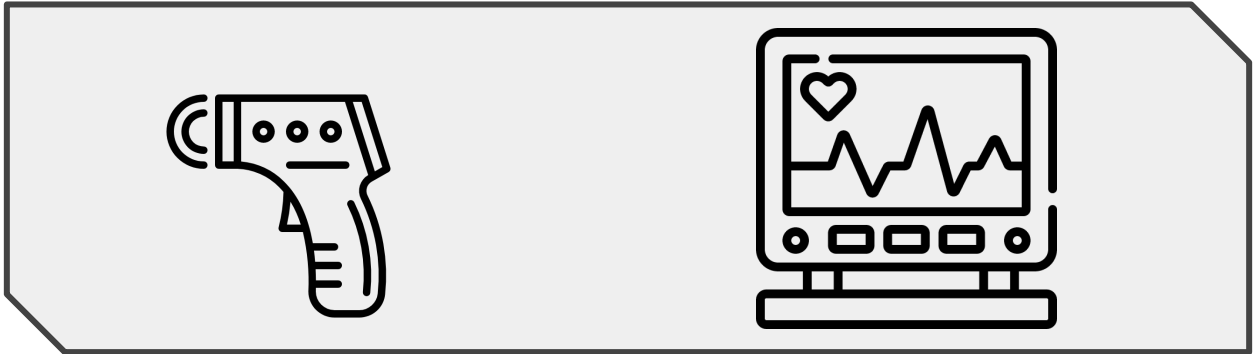
milliliters
(mL)

liters
(L)



WEIGH ME

The Doctor wants to know which equipment is heavier. Help the doctor by coloring which of the two hospital equipment in each box weighs more. Use the scale to help you choose.



FILL IT

Which unit of measurement should the nurse use for each medical tool? Choose the answer from the box and write it down to complete the sentence.

liter

meter

kilometer

gram

kilogram

milliliter

1. This blood test holds 0.5 _____ of water.



2. This wheelchair weighs 14 _____.



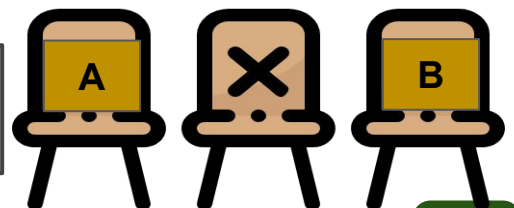
3. This test tube weighs 24 _____.



4. This bottle contains 2 _____ of disinfectant.



5. The distance of seat A from B is 2 _____.



WHICH IS WHICH?

Below are the questions the patient wants to know. Write the letter of the correct answer on the space provided accordingly.

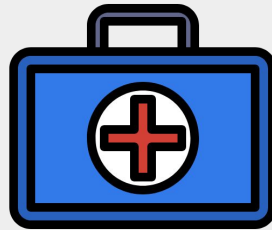
Which is heavier, the medicine bottle or medicine box? ____

A.



25 g

B.



1 kg

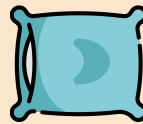
Which is longer, the hospital bed or pillow? ____

A.



3 m

B.



30 cm

Which has more liquid, the dextrose or syringe? ____

A.



2 L

B.





5 mL



CUT IT OUT

Below are amounts of liquid that can be found in the hospital. Cut and paste them under the units to be used to measure their volume. Examples are shown below.

LITER (L)	MILLILITER (mL)
Hand Disinfectant 	One drop blood 



Glass of Water	Eye Drops	Dose of Medicine
Gas in the oxygen tank	Can of soda	Milk for your cereal
Gallon of alcohol	Medicine Syrup	Specimen in Test tube



CRACK THE CODE

The Doctor wants to tell a medical quote. Complete it by decoding the word. Put the letter of the equivalent value of each number below the underline.

“AN _____ A DAY,

35cm	8km	8km	1m	22mm
------	-----	-----	----	------

KEEPS THE DOCTOR
AWAY!”



P 8000 m	C 350 km	H 80 mm	N 100 mm	S 10 km
T 220 cm	E 2.2 cm	A 350 mm	I 220 km	L 1000 mm



HEALTHIER TOGETHER

Help the trainee match the correct SI units used on each hospital-related objects on the left side.

1



milliliter

2



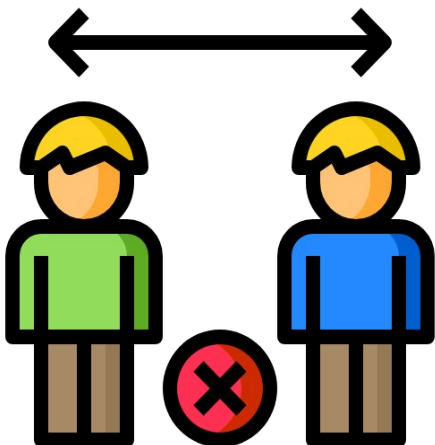
liter

3



meter

4



kilogram



POWER OF TEN

The doctor gave the trainee a test. Help him answer it by filling in the sentences below with the appropriate drug doses conversion to be given to the patient.

1000

100

1000

10

0.001

100

1. One kilogram of caffeine contains _____ grams.

2. One liter of antibiotic contains _____ milliliter.

3. One meter of dose inhaler contains _____ millimeter.

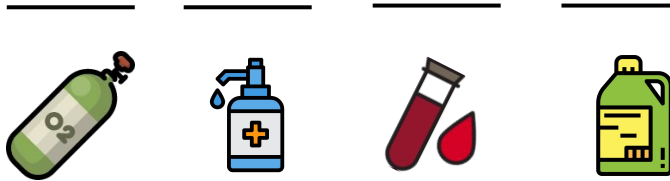
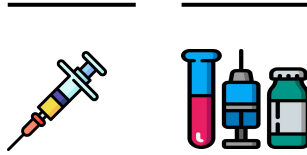
4. One milliliter of paracetamol contains _____ liter.

5. One gram of painkiller contains _____ centigrams.



DOCTOR! DOCTOR!

Decode and solve the secret clause that the patient gave. Fill in the blanks with the letter that matches each hospital-related picture from the box at the bottom of the page. Clue: Only the medical supplies that are measured in mL or L are the correct letters.



!



A



R



I



C



M



S



T



K



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