

Adding and subtracting weights

Remember: Add or subtract kg to kg & g to g.

Add:

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 113 \quad 025 \\ + 127 \quad 030 \\ \hline 240 \text{ kg } 055 \text{ g} \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 245 \quad 034 \\ + 350 \quad 057 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 159 \quad 046 \\ + 391 \quad 077 \\ \hline \end{array}$$

Subtract:

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 42 \quad 015 \\ - 26 \quad 005 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 86 \quad 037 \\ - 16 \quad 019 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 28 \quad 045 \\ + 35 \quad 040 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 536 \quad 028 \\ + 124 \quad 035 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 67 \quad 050 \\ + 77 \quad 049 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 137 \quad 050 \\ - 129 \quad 040 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 172 \quad 040 \\ - 128 \quad 039 \\ \hline \end{array}$$

Word problems

Tommy weighs 13 kg and Kitty weighs 9 kg. What is their weight taken together?

Answer

$$\begin{array}{r} 13 \text{ kg} \\ + 9 \text{ kg} \\ \hline 22 \text{ kg} \end{array}$$

Sunita buys 8 kg apples and 25 kg mangoes. She puts them in a bag. What is the total weight of the bag?

Answer

A shopkeeper sells 32 kg rice on Monday and 47 kg rice on Tuesday. How much rice did he sell in 2 days?

Answer

A fat lady weighs 85 kg. She lost 26 kg in one month. What is her new weight?

Answer

$$\begin{array}{r} 85 \text{ kg} \\ - 26 \text{ kg} \\ \hline 59 \text{ kg} \end{array}$$

A ration shop had 97 kg sugar and 39 kg sugar was sold. How much sugar was left at the shop?

Answer

Ram grew 89 kg rice. Rahim grew 97 kg rice. How much more rice did Rahim grow?

Answer

CAPACITY

Use cup as a non-standard unit of measuring capacity. Compare the capacity of these. Use more or less.



The capacity of the bucket is more than the capacity of the mug.



The capacity of the glass is than the capacity of the mug.



The capacity of the cup is than the capacity of the kettle.



The capacity of the jug is than the capacity of the kettle.



The capacity of the pot is than the capacity of the glass.

Standard unit of capacity : Litre



Litre or L is the standard unit of capacity.



The capacity of both these is one litre or 1L.

Find the capacity of all these with the help of a 1L bottle.





Let us use the 1L 'measuring can' for these objects.

Write 'more than', 'less than' or 'equal to' in the space provided.



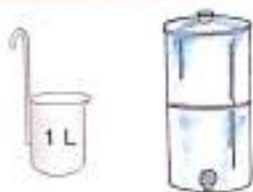
The capacity of the glass is less than 1L.



The capacity of the bucket is more than 1L.



The capacity of the kettle is more than 1L.



The capacity of the water filter is more than 1L.



The capacity of the thermos is more than 1L.



The capacity of the pressure cooker is more than 1L.

More about capacity : ml

For measuring the capacity of small containers, we use a smaller measure called 'millilitre' or 'ml'.

1 litre = 1000 millilitres or 1L = 1000 ml



100×10 cups
= 1000 ml
= 1 L

1000 ml



250×4 cups
= 1000 ml
= 1 L



500×2 cups
= 1000 ml
= 1 L

Write in the quantity of liquid in each container.



2 L 600 ml

Would you use 'L' or 'ml' to measure these?

The petrol in a car	L	Frooty in the pack	
The milk in the can		A can of cooking oil	
Milk in a cup		Coca Cola in the bottle	
Water in a glass		Water in a water tank	

Use a measuring cup to measure the capacity of the given things. Write them down in the space provided:



Your water bottle

L

ml



A cold drink bottle



A mug



A pressure cooker

Adding and subtracting 'L' & 'ml'

Remember: Add or subtract L to L & ml to ml.

Add:

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 210 \quad 037 \\
 + 491 \quad 048 \\
 \hline
 701 \text{ L } 085 \text{ ml}
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 426 \quad 020 \\
 + 124 \quad 040 \\
 \hline
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 47 \quad 028 \\
 + 57 \quad 028 \\
 \hline
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 154 \quad 030 \\
 + 254 \quad 049 \\
 \hline
 \hline
 \hline
 \end{array}$$

Subtract:

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 415 \quad 046 \\
 - 205 \quad 026 \\
 \hline
 210 \text{ L } 020 \text{ ml}
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 511 \quad 082 \\
 - 301 \quad 027 \\
 \hline
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 128 \quad 042 \\
 - 116 \quad 036 \\
 \hline
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{L} \quad \text{ml} \\
 59 \quad 040 \\
 - 46 \quad 011 \\
 \hline
 \hline
 \hline
 \end{array}$$

Word problems

Solve these problems:

A car uses 20 L of petrol every day. How much petrol does it use in 5 days?

Answer L

$$\begin{array}{r} 20\text{ L} \\ \times 5 \\ \hline 100\text{ L} \end{array}$$

A bucket holds 16 L of water. How much water will 8 such buckets hold?

Answer L

Kitty drinks 2 L of milk daily. How much milk will she drink in one week?

Answer L

A cow gives 5 L of milk everyday. How much milk will she give in the month of September?

Answer L

There was 70 L of water in a tank. 29 L more water was added. How much water is there in the tank?

Answer L

A tin contains 20 L of cooking oil. 15 L has been used. How much oil is left?

Answer L

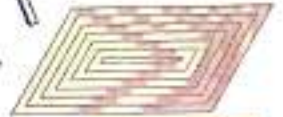
LENGTH

Use a pencil to measure these. Write the measurement in the .

The blackboard is pencils long.



The floor of the classroom is pencils long.



The cupboard in the classroom is pencils long.



My table is pencils long.



I am pencils long.



The door of the classroom is pencils long.



Length : the metre scale

Metre or 'm' is the standard unit of length.

This is a metre scale.
It helps us to measure length.



A metre scale can be used to measure cloth.



It can be used to measure wood.



It can be used to measure the size of a room.

Metre is used to measure long, tall or thick things.

Use the measure of metre for the following things. Write more than, less than or equal to in the space provided.

The length of the cupboard is more than 1m.



1. The length of your bed is *more than* 1m.



2. The length of my classroom door is *more than* 1m.



3. The length of your blackboard is *more than* 1m.



4. The length of the pencil is *less than* 1m.



5. The length of the table is *equal to* 1m.

Length : Centimetres



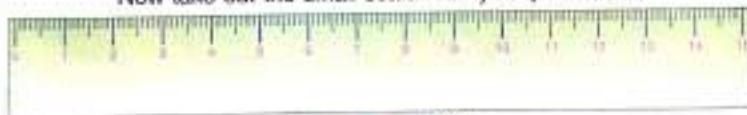
Look carefully at the metre scale.



It is 100 cm long.

There are 100 cm in 1 m.

Now take out the small scale from your pencil box.



It is 15 cm long.

My pencil is cm long.



Now measure your pencil & write.

Length : Centimetres

Use a ruler to find out how long these are. Write down.



10 cm



5 cm



13.5 cm



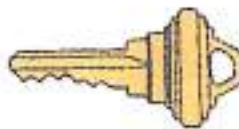
14 cm



6 cm



5.5 cm



Length : Centimetres

Draw lines of these lengths with your ruler.

6 cm 

3 cm 

7 cm 

13 cm 

10 cm 

8 cm 

Always use a sharp pencil for drawing lines.

Adding and subtracting lengths

Remember: Add & subtract m to m & cm to cm.

Add:

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 258 \quad 46 \\ + 192 \quad 29 \\ \hline 450 \text{ m} \quad 75 \text{ cm} \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 546 \quad 27 \\ + 284 \quad 47 \\ \hline 830 \text{ m} \quad 74 \text{ cm} \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 247 \quad 70 \\ + 424 \quad 09 \\ \hline 671 \text{ m} \quad 79 \text{ cm} \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 614 \quad 50 \\ + 028 \quad 40 \\ \hline 642 \text{ m} \quad 90 \end{array}$$

Subtract:

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 200 \quad 50 \\ - 159 \quad 39 \\ \hline 041 \text{ m} \quad 11 \text{ cm} \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 171 \quad 40 \\ - 092 \quad 38 \\ \hline 079 \quad 02 \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 211 \quad 25 \\ - 150 \quad 16 \\ \hline 061 \quad 09 \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 42 \quad 20 \\ - 19 \quad 19 \\ \hline 23 \quad 01 \end{array}$$

Word problems

Try to solve these problems:

Tom is 100 cm tall and Jill is 88 cm tall. How much taller is Tom than Jill? Answer <input type="text" value="12 cm"/>	$\begin{array}{r} 100 \text{ cm} \\ - 88 \text{ cm} \\ \hline 12 \text{ cm} \end{array}$
Neha is making a dress which needs 92 cm frill. She has bought 37 cm of frill. How much more frill does she need? Answer <input type="text" value="55 cm"/>	$\begin{array}{r} 92 \text{ cm} \\ - 37 \text{ cm} \\ \hline 55 \text{ cm} \end{array}$
A thread is 40 cm long. Kamna needs only 27 cm for her frock. How much thread will be left? Answer <input type="text" value="13 cm"/>	$\begin{array}{r} 40 \text{ cm} \\ - 27 \text{ cm} \\ \hline 13 \text{ cm} \end{array}$
The baby was 59 cm long. After 2 months he grew 7 cm more. What is his new length? Answer <input type="text" value="66 cm"/>	$\begin{array}{r} 59 \text{ cm} \\ + 7 \text{ cm} \\ \hline 66 \text{ cm} \end{array}$
Neeti buys 19 m of cloth. Ritu buys 34 m of cloth. How much cloth do the two girls buy? Answer <input type="text" value="53 cm"/>	$\begin{array}{r} 19 \text{ cm} \\ + 34 \text{ cm} \\ \hline 53 \text{ cm} \end{array}$
Length of one side of a square is 5 cm. What is the length of all the sides of the square? Answer <input type="text" value="20 cm"/>	$\begin{array}{r} 4 \times 5 = 20 \text{ cm} \end{array}$

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BRAIN TEASERS

1. Fill in the blanks by putting the correct unit of measure.

- A big bag of rice
- Length of your room
- Milk in a cup
- Length of your pencil
- Your lunch box
- Water in a tank



2. Draw lines of these lengths.

- 10 cm
- 4 cm

3. Find the weight of the following from the weights given on the right.

- 3 sweets $3 \times 5 \text{ g} = 15 \text{ g}$
- 4 books $4 \times 20 \text{ g} = 80 \text{ g}$
- 6 erasers $6 \times 3 \text{ g} = 18 \text{ g}$
- 3 pens $3 \times 5 \text{ g} = 15 \text{ g}$
- 2 books + 1 pen $40 \text{ g} + 15 \text{ g} = 55 \text{ g}$

	Sweet	5 g
	Eraser	3 g
	Book	20 g
	Pen	15 g

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4. ● A cup has a capacity of . Draw the number of cups that can fill



● A bucket has a capacity of . Draw the number of



cups that can fill it.

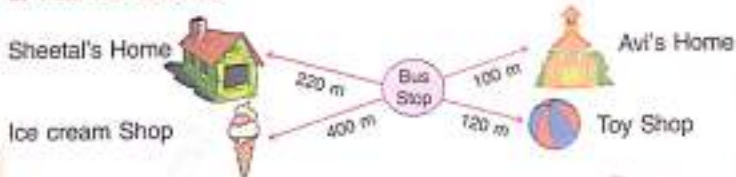


● 1 L = 1000 ml

● 1 Kg = 1000 g

● 1 m = 100 cm

5. Find the distance.



- How many metres is Sheetal's home to Toy shop? 300 m
- How far is Bus stop from Avi's home? 100 m
- Avi is standing at the Bus stop. He wanted to go to the ice-cream shop. How many metres he has to walk? 400 m
- Sheetal went to the Bus stop first and then to Avi's home. How many metres she had to walk? _____

FRACTIONS

Equal and Unequal parts



Colour only those that are equal.



Teacher: Take different objects like chalk, paper etc., and divide them into equal and unequal parts. Ask the children to say whether they are 'equal' or 'unequal'.

Equal parts : Cutting into half

Take a sheet of paper. Your teacher will show you how to divide it into 2 equal parts.

When we divide something into 2 equal parts, we cut it in **half**. We write **half** as $\frac{1}{2}$.



a half + a half
 $\frac{1}{2} + \frac{1}{2}$
makes



1 whole



a half + a half
 $\frac{1}{2} + \frac{1}{2}$
makes



1 whole



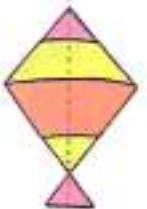
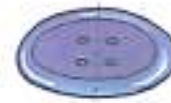
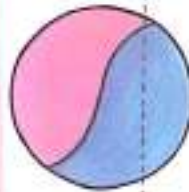
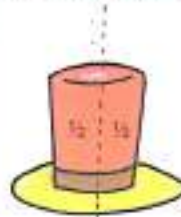
Whole can be
divided into 2 halves



$\frac{1}{2} + \frac{1}{2}$

Teacher: Show the children how to fold a sheet of paper down the middle and divide it into 2 equal parts. Let them also do it.

Tick those that have been divided in half. Write $\frac{1}{2}$ in each half.



Find the missing half by joining the dots. Colour each half with a different colour.



Equal parts : Quarters

Take a sheet of paper. Now divide it into 4 equal parts.
Does your paper look like this when you open it?



When we divide something into 4 equal parts, we cut it in **quarters**. We write **quarter** as $\frac{1}{4}$.



4 quarters
 $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$
make



1 whole



4 quarters
 $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$
make



1 whole



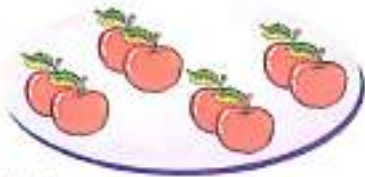
Whole can be cut into 4 quarters



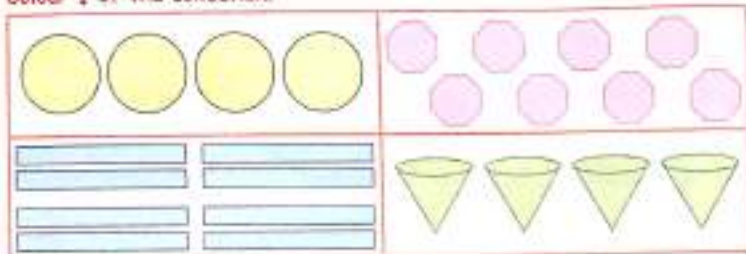
$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

Teacher: Show the children how to fold a sheet of paper to get 4 equal parts.

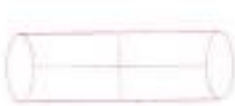
We can divide a collection in 4 equal parts.



Colour $\frac{1}{4}$ of the collection.

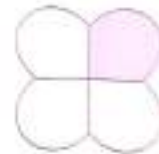
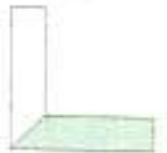
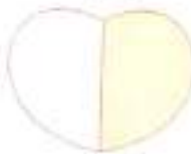
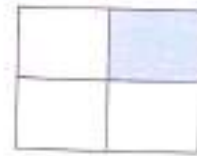


Tick (✓) the shapes that have been divided in quarters. Write $\frac{1}{4}$ in each quarter.



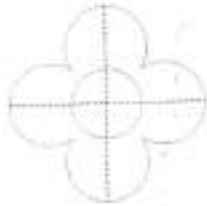
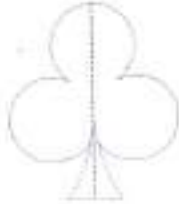
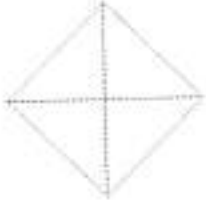
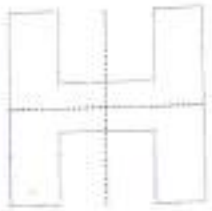
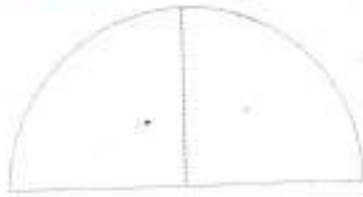
Equal parts : Halves and Quarters

How much of each shape has been shaded : $\frac{1}{2}$ or $\frac{1}{4}$? Write in the .



Have these shapes been cut in halves or quarters? Write $\frac{1}{2}$ or $\frac{1}{4}$ in each part as done in the example.

$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{4}$	$\frac{1}{4}$



Colour $\frac{1}{2}$ or $\frac{1}{4}$ as directed.



$\frac{1}{4}$



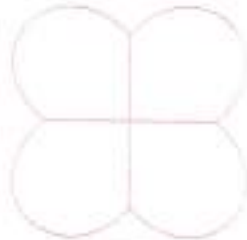
$\frac{3}{4}$



$\frac{1}{4}$



$\frac{1}{4}$



$\frac{1}{2}$



$\frac{1}{2}$

BRAIN TEASERS

1. Fill in the following blanks.

We write half as $\frac{1}{2}$.

We write quarter as $\frac{1}{4}$.

$$\frac{1}{2} + \frac{1}{2} = 1.$$

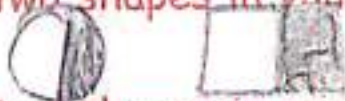
$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1.$$

A fraction is a part of a whole. (whole/half)

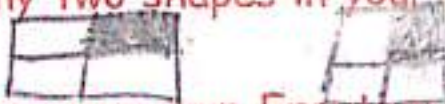
There are 2 halves in a whole. (three/two)

Four quarters make a whole. (quarters/half)

2. Draw any two shapes in your notebook and shade half of them.



3. Draw any two shapes in your notebook and shade quarter of them.



4. To make your own Fraction flag, you need.

a sheet of paper

crayons

glue

a small stick

Divide your paper into either half or quarter.
Colour each part with different colours.
Wave your flag.

