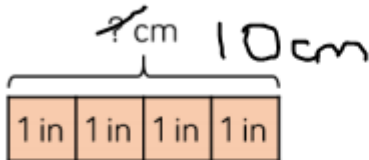


# Answers

## Lesson 2

Length	Weight	Capacity
Miles	Stones	Gallons
Feet	Pounds	Pints
Inches	Ounces	quarts

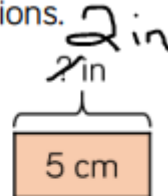
Use the bar models to help with the conversions.



$$16 \text{ in} \approx \boxed{40} \text{ cm}$$

$$15 \text{ in} \approx \boxed{37.5} \text{ cm}$$

$$33 \text{ in} \approx \boxed{0.825} \text{ m}$$



$$10 \text{ cm} \approx \boxed{4} \text{ in}$$

$$1 \text{ cm} \approx \boxed{0.4} \text{ in}$$

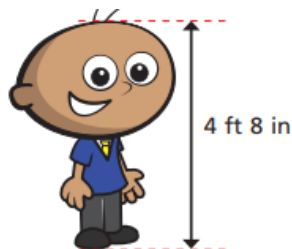
$$5.5 \text{ m} \approx \boxed{220} \text{ in}$$

Inches	Cm	Inches	Cm
0.4	1	40	100
1	2.5	50	125
4	10	100	250
5	12.5		
6	15		
10	25		
15	37.5		
20	50		

There are 12 inches in 1 foot.

Tommy is 4 feet 8 inches tall.

a) What is Tommy's height in inches?



inches

b) Approximately, how tall is Tommy in centimetres?

cm

## Lesson 2 Activity answers

The perimeter of a regular pentagon is 20 inches.

What is the length of each side, in cm? 10cm

$$20 \div 5 = 4 \text{ inches (for each side)}$$

$$4 \text{ inches} \approx \underline{10 \text{ cm}}$$

Phillips Idowu jumped 16.5m in the triple jump at the London Olympics last year.

The winner jumped 18.3m.

How much further did the winner jump in inches? 72inches

To find the difference:  $18.3 - 16.5 = 1.8 \text{ m or } 180 \text{ cm}$

$$180 \text{ cm} \approx \underline{72 \text{ inches}}$$

You could do this by partitioning 180 into

$$100 + 50 + 10 + 10 + 10$$

Compare this to your table to add the following inches:

$$40 + 20 + 4 + 4 + 4$$

(or you might have spotted you can  $\div$  answer in cm by 2.5!)

James is 1.45m tall, and Jodie is 60 inches.

How much taller is Jodie than James? Give your answer in cm or inches 5cm or 2 inches

$$60 \text{ inches} \approx 150 \text{ cm}$$

$$150 - 145 = 5 \text{ (This is the difference in heights)}$$

$$5 \text{ cm} \approx 2 \text{ inches}$$

3 pencils are laid in one long line on the table.

The first is 16cm, the second 8 inches, and the third 14cm.

What is the total length of all 3 pencils, in inches? 20inches

First you need to find the total length of pencils. Either make sure all your measurements are in cm or inches to add them together. I will choose cm (as then I only need to make one conversion)

$$8 \text{ inches} \approx 20\text{cm}$$

$$16 + 20 + 14 = 50\text{cm}$$

$$50\text{cm} \approx \underline{20\text{inches}}$$

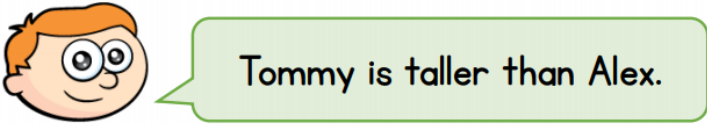
### Lesson 3

True or False ?

Imperial units

Tommy is 4 foot 7 inches tall.

Alex is 135 cm tall.



Tommy is taller than Alex.

White Rose Maths

True

Tommy is 4 foot 7 inches tall  $\approx$  140 cm.

Alex is 135 cm tall.

Use this fact to complete the conversions.

a) 2 kg =  lb

e)  kg = 22 lb

b) 4 kg =  lb

f) 24.2 lbs =  kg

c) 5 kg =  lb

g)  kg = 220 lb

d) 0.5 kg =  lb

h) 2,500 g =  lb

Use this fact to complete the conversions.

a) 2 pints =  ml e)  l = 5 pints

b) 4 pints =  ml f) 56.8 ml =  pints

c) 5 pints =  ml g)  pints = 56.8 l

d) 0.5 pints =  ml h) 20 pints =  l

Jack's house has 3 pints of milk delivered 4 times a week.  
How many litres of milk does Jack have delivered each week?



He uses about 200 ml of milk every day in his cereal. Approximately, how many pints of milk does Jack use for his cereal in a week?

12 pints is approximately 6,816 millilitres, or 6.8 litres.

$$200 \times 7 = 1,400 \text{ ml}$$

$$1400 \div 568 = 2.46 \text{ pints}$$

So Jack uses approximately 2 and a half pints.

## Lesson 3 activity answers

A dog weighs 25 kg.



a) Approximately, what is the weight of the dog in pounds?

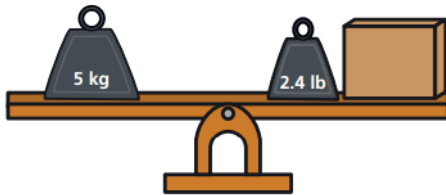
55 lb

b) There are 14 pounds in a stone.

Approximately, what is the weight of the dog in stones and pounds?

3 stone 13 lb

A set of scales is balanced.



What is the weight of the box? Give your answer in pounds.

8.6 lb

The average weight of a newborn baby is 7.5 lb.

Dora weighed 3.5 kg when she was born.

Did Dora weigh more or less than the average weight when she was born? more

Approximately, how much more or less than the average did she weigh?

0.2 lb

The capacity of a barrel is 11.36 l.

a) Approximately, what is the capacity of the barrel in pints?



20 pints

b) There are 8 pints in a gallon.

Approximately, what is the capacity of the barrel in gallons?

2.5 gallons

A milkman delivers 50 pints of milk a day.

How many litres of milk does he deliver in a full week?

198.8 l

## Lesson 4

How many months / weeks / days are there in a year?

*12/52/365 (or 366 in a leap year)*

How many hours / minutes / seconds are there in a day?

*24/24 X 60 or 1440/ 1440 X 60 or 86,400*

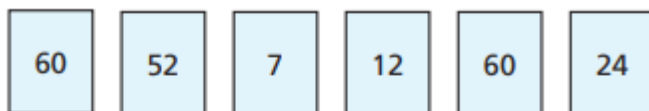
Can 21 days be written in weeks? Can 25 days be written in weeks? Explain your answers.

*Yes - 3 weeks as 7 days in a week of  $21 \div 7 = 3$ ; however  $25 \div 7 = 3$  remainder 4*

Is 0.75 hours the same as 75 minutes? Why or why not?

*No. 0.75 is the same as  $\frac{3}{4}$ . 1 hour is 60 minutes and  $\frac{3}{4}$  of 60 is 45, so 0.75 of 1 hour is 45 minutes.*

Use the numbers to complete the statements.



- a) There are  days in a week.
- b) There are  hours in a day.
- c) There are  minutes in an hour.
- d) There are  weeks in a year.
- e) There are  months in a year.
- f) There are  seconds in a minute.

Three children are running a race.



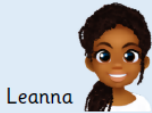
Esin

Esin finishes the race in 2 minutes 5 seconds.



Zach

Zach finishes the race in 195 seconds.



Leanna

Leanna finishes the race in 145 seconds.

Esin: 2 minutes and 5 seconds

Zach: 3 minutes and 15 seconds

Leanna: 2 minutes and 25 seconds

Esin finishes the race first.

Ron and Eva have known each other for 103 days.

For how many weeks and days have they known each other?

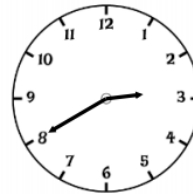
14 weeks and 5 days

### Lesson 5


## False

Eva's next bus will be in 5 minutes so she will arrive at the library at 15:00

Wood Lane	14:35	14:50
School	14:45	15:00
High Street	14:50	15:05
Post Office	14:57	15:12
Library	15:00	15:15
Station	15:05	15:20



Here is a bus timetable.



	Bus A	Bus B	Bus C
Green Park Road	08:45	09:00	09:15
Forrest Drive	09:05	09:20	09:35
Summerville Street	09:22	09:37	09:52
Penny Bridge	09:40	09:55	

a) What time does Bus A arrive at Green Park Road?

08:45

b) What time does Bus B arrive at Summerville Street?

09:37

c) What time does Bus C arrive at Forrest Drive?

09:35

d) Each bus takes the same amount of time to get from Green Park Road to Penny Bridge.

What time does Bus C arrive at Penny Bridge?

10:10

12-hour clock	24-hour clock
6.45am	06:45
11.00pm	23:00
12.01pm	12:01
1.03am	01:03
3.14pm	15:14



Here is an extract from a TV guide.

17:00	17:30	18:00	18:30	19:00	19:30	20:00
News	Catch It!	Giant George	Wilson Street		News	Detective Files

a) At what times is the news on?

17:00

and

19:15


b) What time does *Detective Files* start?

19:30

c) How long is *Wilson Street* on for?

1 hour

Here is part of a train timetable.



St Pancras	06:25	06:40	06:55	07:05	07:22
Stratford	06:32	06:47	07:02	07:12	07:29
Ebbsfleet	06:43	06:59	07:15	07:23	07:40
Ashford	—	07:19	—	07:42	—
Gravesend	06:47	—	07:18	—	07:43

a) How many of the trains go all the way from St Pancras to Gravesend?

3

b) How long does the 06:40 take to get from St Pancras to Ashford?

39

minutes

c) Which train takes the least amount of time to get from St Pancras to Gravesend?

07:22