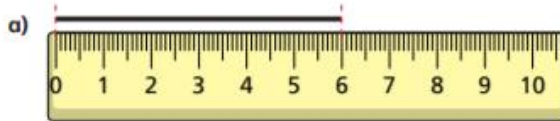# Year 5, Week 12, Lesson 1
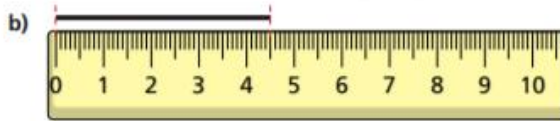
Metric units

1 How long is each line?
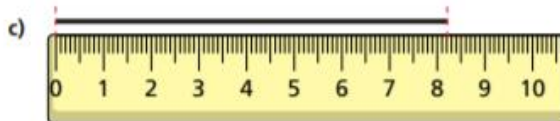
Give your answer in both centimetres and millimetres.
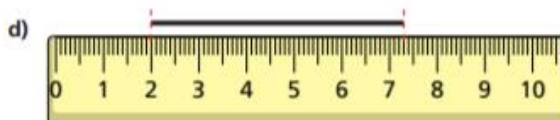
a)

☐ cm ☐ mm

b)

☐ cm ☐ mm

c)

☐ cm ☐ mm

d)

☐ cm ☐ mm

2 Complete the conversion.   1 cm = ☐ mm

3 Dexter is converting units of measure.

If I know how many millimetres are in 1 cm, and how many centimetres are in 1 m, then I can work out how many millimetres are in 1 m.

Complete Dexter's workings to show that he is correct.

1 m = ☐ cm

1 cm = ☐ mm

so, 1 m = ☐ mm

What other conversions could you work out using Dexter's method?

4 Complete the conversions.

a) 15 cm = ☐ mm   e) ☐ cm = 0.2 m

b) 12 m = ☐ cm   f) 4.65 m = ☐ cm

c) 16.5 m = ☐ cm   g) 52,000 mm = ☐ cm

d) ☐ mm = 165 cm   h) 52,000 mm = ☐ m

5 Mo and Rosie are measuring the length of the playground.

I'm going to measure it in metres. — Mo

I'm going to measure it in centimetres. — Rosie

a) Whose unit of measure is more appropriate? _____
   Explain your answer.

b) Rosie has measured the length of the playground as 563 cm.

   What answer will Mo get in metres? [ ] m

6 Eva and Amir are measuring the length of a paper clip.

I'm going to measure it in millimetres. — Eva

I'm going to measure it in centimetres. — Amir

a) Whose unit of measure is more appropriate? _____
   Explain your answer.

b) Amir has measured the length of the paper clip as 0.8 cm.

   What answer will Eva get in millimetres? [ ] mm

7 The table shows the heights of four sunflowers.

Sunflower	A	B	C	D
Height	0.86 m	91 cm	640 mm	72 cm

Put the sunflowers in order, starting with the shortest.

_____

8 The depth of a plank is 15 mm.

12 of the planks are stacked on top of each other.

What is the depth of the stack of planks?

Give your answer in centimetres.

[ ] cm

9 Dexter is 146 cm tall.

Annie is 0.27 m shorter than Dexter.

How tall is Annie?

Give your answer in metres.

[ ] m

10 The thickness of a 20p coin is 2 mm.

Tommy stacks £4 worth of 20p coins on top of each other.

How tall is the stack of coins?

Give your answer in centimetres.
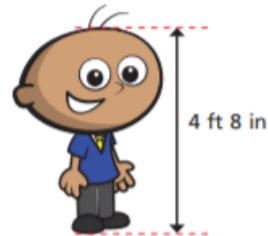
[ ] cm

Year 5, Week 12, Lesson 2

Imperial units

1

> 1 inch is approximately equal to 2.5 cm
>
> 1 inch ≈ 2.5 cm

Use this fact to complete the conversions.

a) 2 inches ≈ ☐ cm

b) 4 inches ≈ ☐ cm

c) 5 inches ≈ ☐ cm

d) 0.5 inches ≈ ☐ cm

e) ☐ inches ≈ 7.5 cm

f) 25 cm ≈ ☐ inches

g) ☐ inches ≈ 22.5 cm

h) 1 m ≈ ☐ inches

2 There are 12 inches in 1 foot.

Tommy is 4 feet 8 inches tall.

4 ft 8 in

a) What is Tommy's height in inches?

☐ inches

b) Approximately, how tall is Tommy in centimetres?

☐ cm

3

> 1 kilogram is approximately equal to 2.2 pounds
>
> 1 kg ≈ 2.2 lb

Use this fact to complete the conversions.

a) 2 kg ≈ ☐ lb

b) 4 kg ≈ ☐ lb

c) 5 kg ≈ ☐ lb

d) 0.5 kg ≈ ☐ lb

e) ☐ kg ≈ 22 lb

f) 24.2 lbs ≈ ☐ kg

g) ☐ kg ≈ 220 lb

h) 2,500 g ≈ ☐ lb

4 A dog weighs 25 kg.

25 kg

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

☐ lb

b) There are 14 pounds in a stone.

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

☐ stone ☐ lb

5

1 pint is approximately equal to 568 millilitres

1 pint ≈ 568 ml

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

6 The capacity of a barrel is 11.36 l.

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

11.36 litres

[____] pints

b) There are 8 pints in a gallon.

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

[____] gallons

7 A set of scales is balanced.

5 kg   2.4 lb

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

[____] lb

8 A milkman delivers 50 pints of milk a day.

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

[____] l

9 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? _____

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

[____] lb

Converting units of time

White Rose Maths

1 Use the numbers to complete the statements.

| 60 | 52 | 7 | 12 | 60 | 24 |

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.

2 Tommy and Kim are completing the statement.

> There are ☐ days in a year.
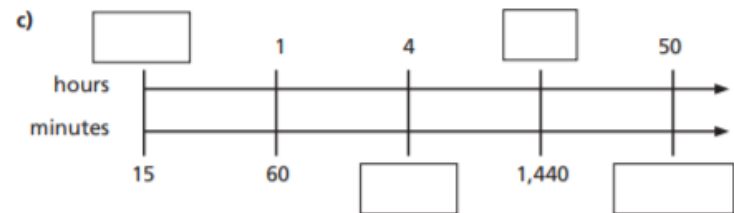
The answer is 365

Tommy

The answer is 366

Kim

Who do you agree with? _____

Talk about it with a partner.

3 Fill in the boxes to complete the conversions.

a)

years: ☐ 1 2 ☐ 9

months: 6 12 ☐ 48 ☐

b)

weeks: 0.5 1 3 ☐ ☐

days: ☐ 7 ☐ 63 364

c)

hours: ☐ 1 4 ☐ 50

minutes: 15 60 ☐ 1,440 ☐
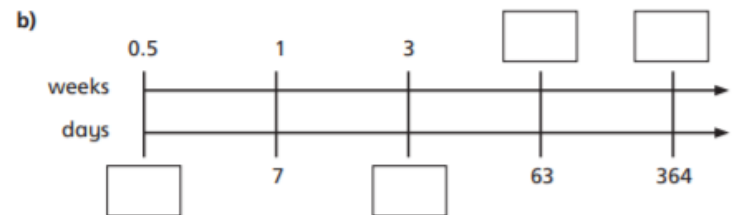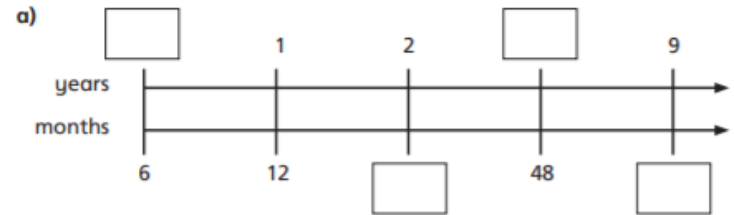
4 Complete the conversions.

a) 6 weeks = ☐ days

b) 7 years = ☐ months

c) 5 minutes = ☐ seconds

d) 3 days = ☐ hours

e) ☐ weeks = 98 days

f) ☐ minutes = 9 hours

g) ☐ hours = 2.5 days

i) $\frac{1}{2}$ an hour = ☐ minutes

h) 18 months = ☐ years

j) ☐ seconds = $\frac{3}{4}$ of a minute

5 Alex and Jack are converting 52 days into weeks.

Alex: I can't do it because 52 is not a multiple of 7

Jack: I can convert it into weeks and days.

Who is correct? _____

Talk about it with a partner.

6 Ron and Eva have known each other for 103 days.

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

☐ weeks and ☐ days

7 Amir and Annie ran a race.

Amir ran the race in 3 minutes and 14 seconds.

Annie ran the race in 187 seconds.

Who was faster? _____

Show your workings.

8 Dora's birthday is on 17 August.

It's currently 6 pm on 14 August.

a) How many hours is it until Dora's birthday?

☐ hours

b) How many minutes is it until Dora's birthday?

☐ minutes

c) How many seconds is it until Dora's birthday?

☐ seconds

9 Work out how old you are in days, hours and minutes.

☐ days ☐ hours ☐ minutes

Year 5, Week 12, Lesson 4

Timetables

1 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?

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

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

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?

e) Eva needs to be at Summerville Street by 9:35

Which bus does she need to get from Green Park Road?

2 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? ☐ and ☐

b) What time does *Detective Files* start? ☐

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

d) Eva is working out how long *Catch It!* is on for.

Here are her workings.

Catch It! is on for 85 minutes.

$$\begin{array}{c} 79 \\ 1\cancel{8}:\cancel{0}{}^{1}0 \\ -17:15 \\ \hline 00:85 \end{array}$$

Do you agree with Eva? _____

Talk about it with a partner.

e) *The news is on for half an hour in total.*

Do you agree with Ron? _____

Explain your answer.

3 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?

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

☐ minutes

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

_____

4 In this timetable, all the trains stop at every station and the time taken between stations does not change.

Fill in the missing information.

Aberford	08:30	11:00	13:10	
Cartown		11:22		
Donville			13:47	
Highborough			14:01	
Southland	09:57			16:03

5 Draw a timetable of your school day.

a) How many minutes do you spend at school?

☐ minutes

b) How many seconds do you have for your lunch break?

☐ seconds

c) Write your own questions for a partner to answer about your timetable.

_____

_____

_____

d) Work with a partner to create your timetable for the rest of the week.

Work out how many hours, minutes and days you spend on each subject.