



W.C. 13th July 2020

<https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1>

## Maths

Use these worksheets to work from and not on. All you need is a piece of paper, pencil and maybe a ruler.

### Monday

Convert between different units of metric measure kg, km, mg, ml

<https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1>



### Mild

- 1 The bar model shows that 1 kg is equal to 1,000 g.  
Use the bar models to complete the conversions.

|         |
|---------|
| 1 kg    |
| 1,000 g |

a)

|      |      |      |
|------|------|------|
| 1 kg | 1 kg | 1 kg |
|      |      |      |

3 kg =  g

b)

|      |      |      |      |      |
|------|------|------|------|------|
| 1 kg | 1 kg | 1 kg | 1 kg | 1 kg |
|      |      |      |      |      |

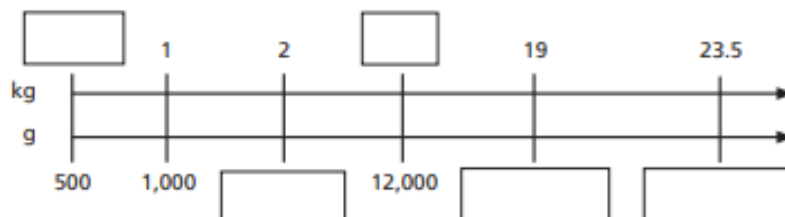
5 kg =  g

c)

|         |         |         |         |
|---------|---------|---------|---------|
|         |         |         |         |
| 1,000 g | 1,000 g | 1,000 g | 1,000 g |

kg = 4,000 g

- 2 Fill in the missing values to convert between kilograms and grams.



- 3 Dexter and Whitney are converting 27.5 kg into grams.



Dexter

I'm going to use bar models.

Whitney



I'm going to use a double number line.

- a) Whose method is more efficient?  
Explain your answer.
- b) Complete the conversion.



- 1 The bar model shows that 1 m is equal to 1,000 mm.

Use the bar models to complete the conversions.

|          |
|----------|
| 1 m      |
| 1,000 mm |

a) 

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
| 1 m | 1 m | 1 m | 1 m | 1 m | 1 m |
|     |     |     |     |     |     |

 6 m =  mm

b) 

|     |     |     |
|-----|-----|-----|
| 1 m | 1 m | 1 m |
|     |     |     |

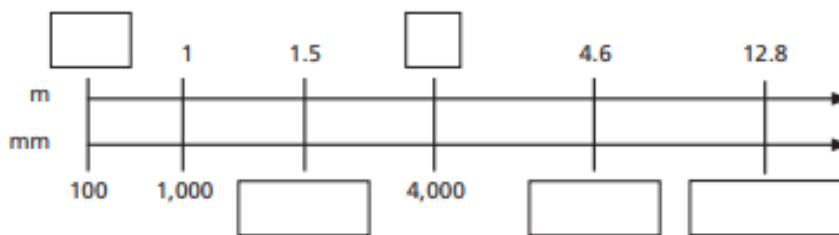
 3 m =  mm

c) 

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
|          |          |          |          |          |
| 1,000 mm | 1,000 mm | 1,000 mm | 1,000 mm | 1,000 mm |

 m = 5,000 mm

- 2 Fill in the missing values to convert between metres and millimetres.



- 3 Alex and Jack are converting 3.5 m into millimetres.



I'm going to use bar models.

Alex

I'm going to use a double number line.



Jack

- a) Complete both methods to show that they get the same answer.

Alex's method

|  |
|--|
|  |
|  |

Jack's method

|  |
|--|
|  |
|  |

- b) Complete the conversion.  
c) Whose method do you prefer?

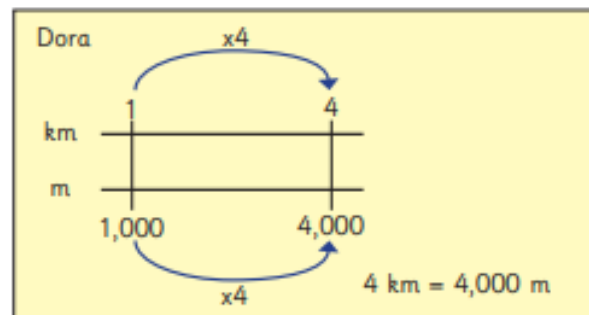
Explain your answer.

## Medium

- 4 Tommy and Dora are converting 4 km into metres.

Here are their workings.

|         |         |         |         |                |
|---------|---------|---------|---------|----------------|
| Tommy   |         |         |         |                |
| 1 km    | 1 km    | 1 km    | 1 km    |                |
| 1,000 m | 1,000 m | 1,000 m | 1,000 m | 4 km = 4,000 m |



Whose method do you prefer?

Explain your answer.

- 5 Complete the conversions.

a) 18 kg =  g

e) 11.5 km =  m

b) 18 km =  m

f)  g = 41.2 kg

c) 21,000 g =  kg

g)  g = 0.1 kg

d) 32,500 m =  km

h) 100 km =  m

- 6 Complete the conversions.

a)  $\frac{1}{2}$  kg =  g

b)  $\frac{1}{10}$  km =  m

$\frac{1}{4}$  kg =  g

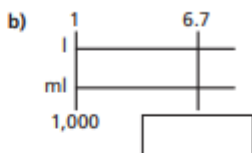
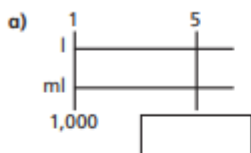
$\frac{1}{5}$  km =  m

$\frac{3}{4}$  kg =  g

$\frac{3}{10}$  km =  m

- 4 Use the information to complete the representations and conversions.

1 litre = 1,000 ml



c)

|          |     |     |     |
|----------|-----|-----|-----|
| 1 l      | 1 l | 1 l | 1 l |
| 1,000 ml |     |     |     |

d)

|          |          |          |        |
|----------|----------|----------|--------|
| 1 l      |          |          |        |
| 1,000 ml | 1,000 ml | 1,000 ml | 500 ml |

- 5 Complete the conversions.

- a) 15 m =  mm      e) 11.05 m =  mm  
 b) 15 l =  ml      f)  ml = 71.25 l  
 c) 63,000 ml =  l      g)  mm = 0.1 m  
 d) 47,500 mm =  m      h) 100 l =  ml

## Spicy

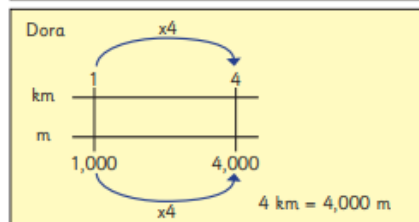
- 4 Tommy and Dora are converting 4 km into metres.

Here are their workings.

Tommy

|         |         |         |         |
|---------|---------|---------|---------|
| 1 km    | 1 km    | 1 km    | 1 km    |
| 1,000 m | 1,000 m | 1,000 m | 1,000 m |

4 km = 4,000 m



Whose method do you prefer?

Explain your answer.

- 5 Complete the conversions.

- a) 18 kg =  g      e) 11.5 km =  m  
 b) 18 km =  m      f)  g = 41.2 kg  
 c) 21,000 g =  kg      g)  g = 0.1 kg  
 d) 32,500 m =  km      h) 100 km =  m

- 6 Complete the conversions.

- a)  $\frac{1}{2}$  kg =  g      b)  $\frac{1}{10}$  km =  m  
 $\frac{1}{4}$  kg =  g       $\frac{1}{5}$  km =  m  
 $\frac{3}{4}$  kg =  g       $\frac{3}{10}$  km =  m

- c)  $\frac{3}{6}$  kg =  g      d)  $\frac{20}{20}$  km =  m  
 $\frac{12}{24}$  kg =  g       $\frac{1}{20}$  km =  m  
 $\frac{99}{198}$  kg =  g       $\frac{19}{20}$  km =  m

- 7 Write <, > or = to compare the measurements.

- a) 0.5 km  600 m      c) 5,000 g + 2 kg  5.5 kg + 1,500 g  
 b) 3.7 kg  3,200 g      d)  $\frac{7}{10}$  km +  $\frac{3}{10}$  km + 965 m  817 m + 1 km

- 8 A bag of apples weighs 600 g.

How much do 8 bags of apples weigh?  
 Give your answer in kilograms.



- 9 Ron buys 3.8 kg of potatoes and 1,250 g of carrots.  
 He pays with a £20 note.  
 How much change does he get?



- 10 Dora runs 200 m in 32 seconds.

If she runs at the same speed, how long will it take her to run 5 km?

Is Dora likely to be able to keep up this speed?

- 6 Eva wants to go on a ride at a theme park.



I am 1,010 mm tall.



Can Eva go on the ride?

Explain your answer.

- 7 Write  $<$ ,  $>$  or  $=$  to compare the measurements.

a)  $\frac{2}{5}$  km  600 m

c)  $0.8$  km  $-$  300 m   $\frac{7}{10}$  km

b)  $\frac{9}{10}$  l + 100 ml  1,000 ml

d)  $\frac{1}{5}$  l + 200 ml +  $\frac{4}{5}$  ml   $\frac{1}{4}$  l + 1 l

- 8 A piece of string is 2.76 m long.

How many 30 mm pieces can be cut from the string?

- 9 Orange juice is sold in bottles and cartons.

- a) Which is better value, the carton or the bottle?

Explain your answer.



- b) Dexter buys 12 cartons and 5 bottles of juice.

He pours them into glasses with 200 ml of juice in each glass.

He sells each glass of juice for 40p.

He sells all the glasses of juice.

How much profit does he make?

## Tuesday

<https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1>

### Converting between metric and imperial measurements

Mild

1

1 inch is approximately equal to 2.5 cm

1 inch  $\approx$  2.5 cm

Use this fact to complete the conversions.

a) 2 inches  $\approx$   cm

e)  inches  $\approx$  7.5 cm

b) 4 inches  $\approx$   cm

f) 25 cm  $\approx$   inches

c) 5 inches  $\approx$   cm

g)  inches  $\approx$  22.5 cm

d) 0.5 inches  $\approx$   cm

h) 1 m  $\approx$   inches

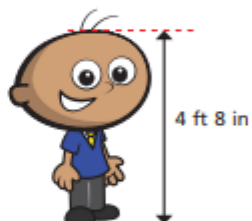


2

There are 12 inches in 1 foot.

Tommy is 4 feet 8 inches tall.

a) What is Tommy's height in inches?



b) Approximately, how tall is Tommy in centimetres?

3

1 kilogram is approximately equal to 2.2 pounds

1 kg  $\approx$  2.2 lb

Use this fact to complete the conversions.

a) 2 kg  $\approx$   lb

e)  kg  $\approx$  22 lb

b) 4 kg  $\approx$   lb

f) 24.2 lbs  $\approx$   kg

c) 5 kg  $\approx$   lb

g)  kg  $\approx$  220 lb

d) 0.5 kg  $\approx$   lb

h) 2,500 g  $\approx$   lb

**Medium**

3

1 kilogram is approximately equal to 2.2 pounds

$$1 \text{ kg} = 2.2 \text{ lb}$$

Use this fact to complete the conversions.

a)  $2 \text{ kg} = \boxed{\phantom{00}} \text{ lb}$

e)  $\boxed{\phantom{00}} \text{ kg} = 22 \text{ lb}$

b)  $4 \text{ kg} = \boxed{\phantom{00}} \text{ lb}$

f)  $24.2 \text{ lbs} = \boxed{\phantom{00}} \text{ kg}$

c)  $5 \text{ kg} = \boxed{\phantom{00}} \text{ lb}$

g)  $\boxed{\phantom{00}} \text{ kg} = 220 \text{ lb}$

d)  $0.5 \text{ kg} = \boxed{\phantom{00}} \text{ lb}$

h)  $2,500 \text{ g} = \boxed{\phantom{00}} \text{ lb}$

4

A dog weighs 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

$$1 \text{ pint} = 568 \text{ ml}$$

Use this fact to complete the conversions.

a)  $2 \text{ pints} = \boxed{\phantom{00}} \text{ ml}$  e)  $\boxed{\phantom{00}} \text{ l} = 5 \text{ pints}$

b)  $4 \text{ pints} = \boxed{\phantom{00}} \text{ ml}$  f)  $56.8 \text{ ml} = \boxed{\phantom{00}} \text{ pints}$

c)  $5 \text{ pints} = \boxed{\phantom{00}} \text{ ml}$  g)  $\boxed{\phantom{00}} \text{ pints} = 56.8 \text{ l}$

d)  $0.5 \text{ pints} = \boxed{\phantom{00}} \text{ ml}$  h)  $20 \text{ pints} = \boxed{\phantom{00}} \text{ l}$

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?



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.



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

## Wednesday

<https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1>

### Convert between different units of time

#### Mild

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



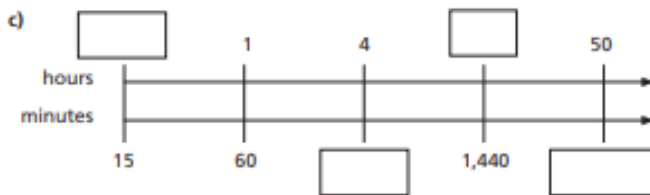
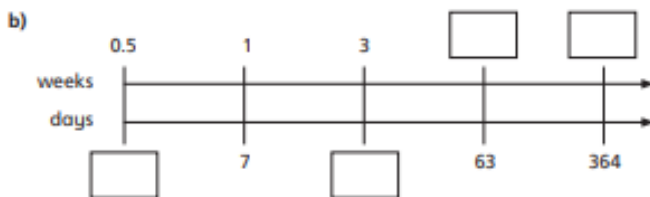
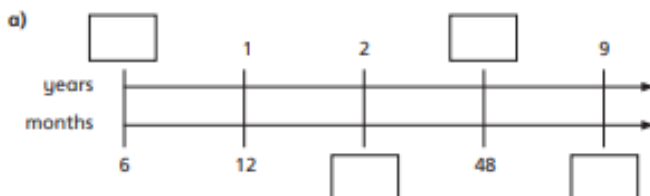
The answer is 366

Kim

Who do you agree with? \_\_\_\_\_

Talk about it with a partner.

3 Fill in the boxes to complete the conversions.



## Medium

4 Complete the conversions.

a) 6 weeks =  days

d) 3 days =  hours

b) 7 years =  months

e)  weeks = 98 days

c) 5 minutes =  seconds

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.



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

Alex

I can convert  
it into weeks  
and days.



Jack

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

## Spicy

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

Thursday

Understand and interpret timetables

Mild

## Timetables

Rose  
Maths

- 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.

$$\begin{array}{r}
 79 \\
 18:10 \\
 - 17:15 \\
 \hline
 00:55
 \end{array}$$

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.

© White Rose Maths 2020

Medium

- 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 |

## Spicy

- 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.

## Friday

### Maths Riddles

As I was going to the fair, I saw a man with golden hair. He had 3 sons each with another one. How many people were going to the fair?

.....

It takes a man an hour and ten minutes to walk along each side of a square field. Walking at the same pace it only takes him 70 minutes to walk along the last side. How?

.....

There is a pink single storey house and everything in it is pink. The doors are pink, the windows are pink and the TV is pink. What colour are the stairs?

.....

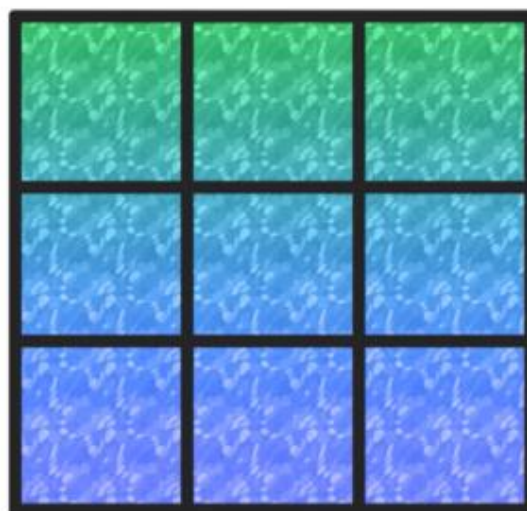
There is a pink house made of pink bricks, a blue house made of blue bricks, and an orange house made of orange bricks. What is a greenhouse made of?

.....

Twenty-seven ducks are going to the pond. Five of them got lost, thirteen of them are staying home, and nine of them are at the pond. Where are the rest of them?



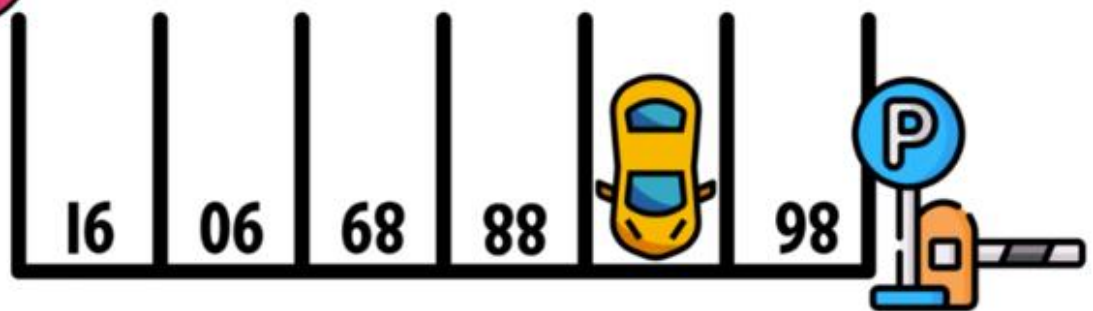
How many  
total squares  
are there?





When Lisa was 6 years old,  
her sister Lucy was half her age.

If Lisa is 40 years old today,  
how old is Lucy?



What is the number of the parking spot  
occupied by the car in the diagram above?