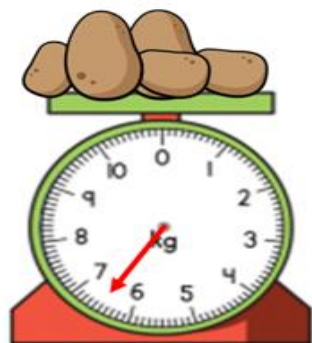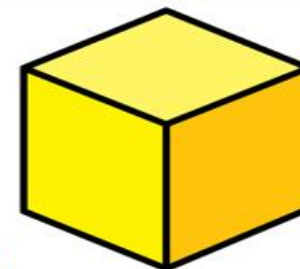SIMMERING BRONZE

# Flashback 4

Year 3 | Week 9 | Day 4
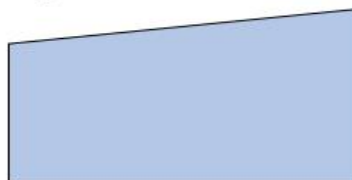
1) The potatoes weigh ☐ kg and ☐ g

2) How many pairs of perpendicular lines are in the shape? ☐

3) How many acute angles are in the shape above? ☐

4) Which number is represented? ☐
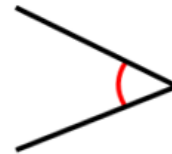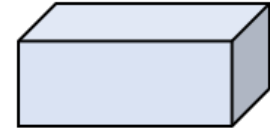
White Rose Maths

# Flashback 4

1) What type of angle is this?

2) True or False?

More chocolate eggs were sold in May than March.

Sales of Chocolate Eggs
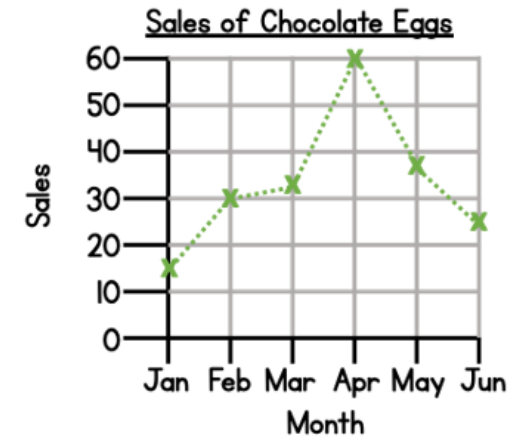
3) How many days are in a leap year?

4) Divide 462 by 3
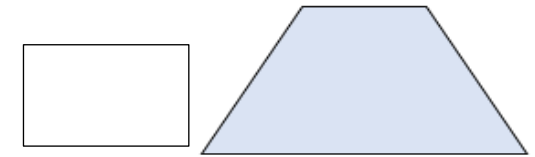
White Rose Maths

# Flashback 4

1) How many mm are the same as 0.6 m?

2) What will the coordinates of the vertices be if the triangle is reflected in the mirror line?

3) What is the sum of the angles in a full turn?

4) Add 6,294 to 7,341
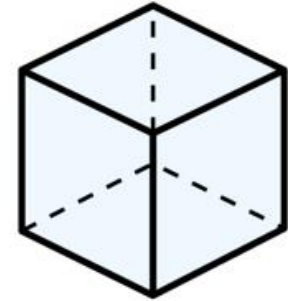
White Rose Maths

Flashback 4

1) How many degrees are there in a right angle?

2) Eva mixes 2 parts of juice with 3 parts of water
If she uses 10 parts of juice, how many parts of water should she use?

3) Find the perimeter of the square.

21 cm

4) Round 7,825 to the nearest hundred.

White Rose Maths

# Flashback 4

1) The potatoes weigh __6__ kg and __500__ g
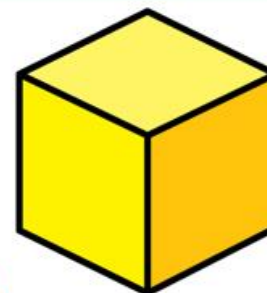
2) How many pairs of perpendicular lines are in the shape?
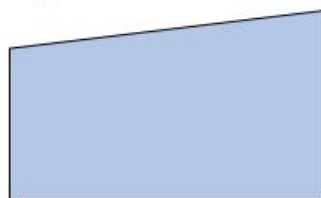
2

3) How many acute angles are in the shape above?    1

4) Which number is represented?    304

White Rose Maths

# Flashback 4
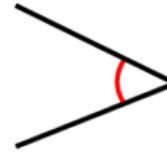
1) What type of angle is this?    acute angle
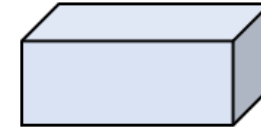
2) True or False?

   More chocolate eggs were sold in
   May than March.    True

Sales of Chocolate Eggs
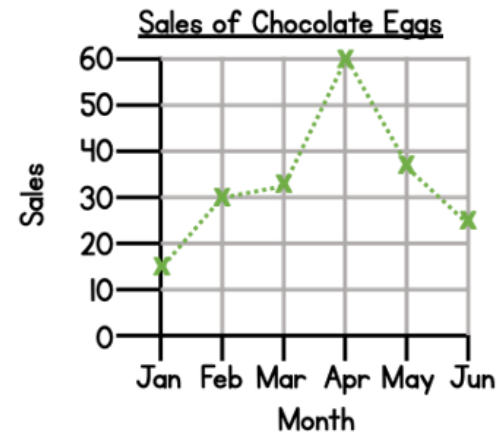
3) How many days are in a leap year?    366 days

4) Divide 462 by 3    154

White Rose Maths

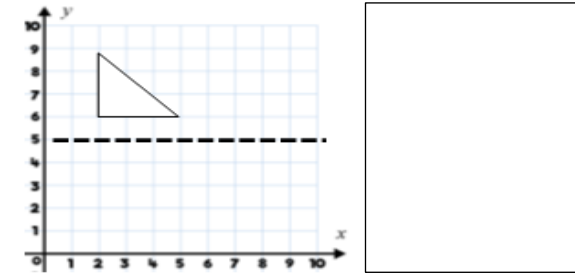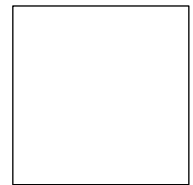# Flashback 4

1) How many mm are the same as 0.6 m?    600
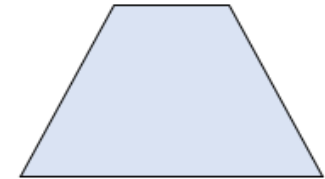
2) What will the coordinates of the vertices be if the triangle is reflected in the mirror line?    (2,4) (5,4) (2,1)

3) What is the sum of the angles in a full turn?    360°

4) Add 6,294 to 7,341    13,635

White Rose Maths

# Flashback 4

1) How many degrees are there in a right angle?

90
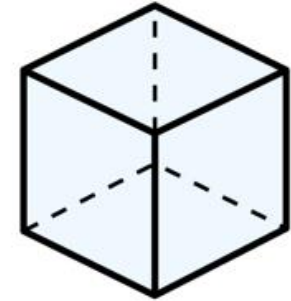
2) Eva mixes 2 parts of juice with 3 parts of water
If she uses 10 parts of juice, how many parts of
water should she use?
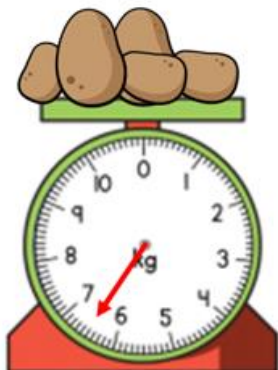
15

3) Find the perimeter of the square.

84 cm

21 cm

4) Round 7,825 to the nearest hundred.

7,800

White Rose Maths

LEVEL 1 – HOURS IN A DAY

LEVEL 2 – MEASURING TIME IN SECONDS

LEVEL 3 – HOURS MINUTES AND SECONDS

## FACTS YOU MIGHT NEED

HOW MANY DAYS ARE THERE IN EACH MONTH?

HOW MANY DAYS IN A YEAR?

HOW MANY DAYS IN A LEAP YEAR?

60 SECONDS = 1 MINUTE

60 MINUTES = 1 HOUR

15 MINUTES = ¼ AND HOUR

30 MINUTES = ½ AN HOUR

45 MINUTES = ¾ HOUR

24 HOURS = 1 FULL DAY

7 DAYS = 1 WEEK

14 DAYS = 1 FORTNIGHT (NOT FORTNITE THE GAME)

28 DAYS = 4 WEEKS = A MONTH (NOT A CALENDAR MONTH)

365 DAYS (AND ¼) = 52 WEEKS = 1 YEARS = 366 DAYS = 52 WEEKS = 1 LEAP YEAR

LEVEL 1

**1** Write the times of day in order of when they happen.

afternoon    morning    midnight    midday    evening

**2** Match the description to the correct number.

| | |
|---|---|
| months in a year | 5 |
| days in a week | 168 |
| hours in a day | 31 |
| days in a non-leap year | 7 |
| hours in a week | 24 |
| days in a school week | 365 |
| maximum number of days in a month | 12 |

**3** Fill in the missing numbers.

a) 1 day = 24 hours

☐ days = 48 hours

4 days = ☐ hours

☐ days = 960 hours

41 days = ☐ hours

b) 1 week = 7 days

2 weeks = ☐ days

☐ weeks = 21 days

60 weeks = ☐ days

63 weeks = ☐ days

**4** Aisha arrives home at 11 o'clock.

It must be nearly lunchtime.

Dora

It must be dark outside.

Amir

Who do you agree with?

Explain your answer.

**5** There are 5 days in a school week.

a) What is the difference in the number of days in 4 **school weeks** compared to 4 whole weeks?

b) There are 7 hours in a school day.
How many more hours are there in 5 full days than 5 school days?

Talk to a partner about how you worked out your answers.

**6** Kim and Dexter are working out how many more hours are in the month of August than September.

I can work out how many hours are in August in total, how many hours are in September in total and subtract one from the other.

Kim thinks there is an easier way of working it out.

What might Kim's method be?

Talk about it with a partner.

**4** Aisha arrives home at 11 o'clock.

It must be nearly lunchtime.

Dora

It must be dark outside.

Amir

Who do you agree with?

Explain your answer.

**5** There are 5 days in a school week.

**a)** What is the difference in the number of days in 4 **school weeks** compared to 4 whole weeks?

**b)** There are 7 hours in a school day.
How many more hours are there in 5 full days than 5 school days?

Talk to a partner about how you worked out your answers.

**6** Kim and Dexter are working out how many more hours are in the month of August than September.

I can work out how many hours are in August in total, how many hours are in September in total and subtract one from the other.

Kim thinks there is an easier way of working it out.

What might Kim's method be?

Talk about it with a partner.

**7** Brett knows that there are 24 hours in one day, 48 hours in two days and 72 hours in three days.

Use these facts to work out how many hours there are in each month.

- April

- January

- February of a non-leap year

- February of a leap year

**8** There are more days in October than September.

Therefore, there are more school days in October than September.

Is this always, sometimes or never true?

How do you know?

**9** Esther goes to school for 5 hours each day.

There are no school holidays in the month of March.

How many hours could Esther spend at school in March?

Compare answers with a partner.

**1** The table shows how long it took four children to run a race.

| Child | Time |
|-------|------|
| Annie | 2 minutes 40 seconds |
| Dora | 2 minutes 3 seconds |
| Tommy | 2 minutes 30 seconds |
| Teddy | 2 minutes 4 seconds |

a) Match each child to a time.

Annie      Dora      Tommy      Teddy

00:02:30      00:02:04      00:02:03      00:02:40

b) Using the fact that there are 60 seconds in one minute, write each child's time in seconds.

**2** Scott draws a bar model to help him convert 3 minutes and 17 seconds into seconds.

| 60 | 60 | 60 | 17 |

60 + 60 + 60 + 17 = 197

So 3 minutes and 17 seconds = 197 seconds

Talk to a partner about why Scott's method works.

**3** Complete the statements.

a) 2 minutes and 17 seconds = [    ] seconds

b) 5 minutes and 12 seconds = [    ] seconds

c) 4 minutes and 42 seconds = [    ] seconds

d) 3 minutes and [    ] seconds = 199 seconds

e) [    ] minutes and 7 seconds = 367 seconds

f) [    ] minutes and [    ] seconds = 261 seconds

g) 654 seconds = [    ] minutes and [    ] seconds

**4** Write <, > or = to compare the times.

a)    1 minute and 23 seconds  ◯  81 seconds

b)    2 minutes and 15 seconds  ◯  135 seconds

c)    89 seconds  ◯  1 minute and 34 seconds

**5**

327 seconds is the same as 3 minutes and 27 seconds.

Do you agree with Whitney?

Why?

**3** Complete the statements.

a) 2 minutes and 17 seconds = ☐ seconds

b) 5 minutes and 12 seconds = ☐ seconds

c) 4 minutes and 42 seconds = ☐ seconds

d) 3 minutes and ☐ seconds = 199 seconds

e) ☐ minutes and 7 seconds = 367 seconds

f) ☐ minutes and ☐ seconds = 261 seconds

g) 654 seconds = ☐ minutes and ☐ seconds

**4** Write <, > or = to compare the times.

a) 1 minute and 23 seconds ◯ 81 seconds

b) 2 minutes and 15 seconds ◯ 135 seconds

c) 89 seconds ◯ 1 minute and 34 seconds

**5**

*327 seconds is the same as 3 minutes and 27 seconds.*

Do you agree with Whitney?

Why?

**6** How long does the roller coaster ride last in minutes and seconds?

Duration 137 seconds

**7** Alex, Jack and Amir are doing a puzzle.

They want to know who did it the quickest.

Alex: *I did it in 152 seconds.*

Jack: *I did it in 2 minutes and 42 seconds.*

Amir: *I did it 10 seconds faster than Alex.*

a) How long did each child take to complete the puzzle? Give your answer in seconds, and in minutes and seconds.

b) Jack: *I won because my time was highest!*

Do you agree with Jack?

Talk about it with a partner.

LEVEL 3

**1** Sort the activities into the table depending on approximately how long each one takes to complete.

travel to school     wash and dry laundry     get dressed

travel to the Moon     watch a TV show     listen to a song

eat a small chocolate bar     sneeze     write your name

| Less than 10 seconds | Less than 1 minute | Less than 5 minutes | Less than 1 hour | More than 1 hour |
|---|---|---|---|---|
| | | | | |

**2** Complete the statements.

a) one minute = [ ] seconds     c) one day = [ ] hours

2 minutes = [ ] seconds     3 days = [ ] hours

4 minutes = [ ] seconds     12 days = [ ] hours

eighty minutes = [ ] seconds     thirty days = [ ] hours

b) 1 hour = [ ] minutes     d) 1 minute = [ ] seconds

5 hours = [ ] minutes     1 hour = [ ] minutes

ten hours = [ ] minutes     1 hour = [ ] seconds

15 hours = [ ] minutes     2 hours = [ ] seconds

How did you work this out? Talk about it with a partner.

**3** Write <, > or = to complete the statements.

5 minutes ( ) 5 seconds     $\frac{1}{2}$ hour ( ) 60 minutes

5 minutes ( ) 50 seconds     $\frac{1}{2}$ hour ( ) 6 minutes

5 minutes ( ) 500 seconds     30 minutes ( ) $\frac{1}{2}$ hour

**4** Huan ran a race in 3.5 minutes.

Eva ran the race in 312 seconds.

Who was quicker?

How much quicker were they?

**5** The time is 10 past 3

Draw hands on the clocks to show what time it will be:

a) in 10 minutes     b) in 60 minutes

**White Rose Maths**

**3** Write <, > or = to complete the statements.

5 minutes ◯ 5 seconds

$\frac{1}{2}$ hour ◯ 60 minutes

5 minutes ◯ 50 seconds

$\frac{1}{2}$ hour ◯ 6 minutes

5 minutes ◯ 500 seconds

30 minutes ◯ $\frac{1}{2}$ hour

**4** Huan ran a race in 3.5 minutes.

Eva ran the race in 312 seconds.

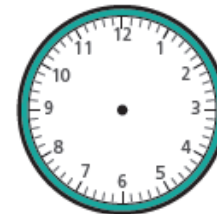Who was quicker?

How much quicker were they?

**5** The time is 10 past 3



Draw hands on the clocks to show what time it will be:

**a)** in 10 minutes



**b)** in 60 minutes



**c)** in 120 seconds



**d)** in 1.5 hours
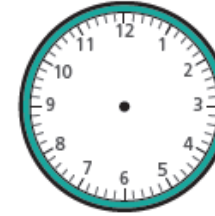


**6** Scott, Esther and Dani timed how long it took to have a shower.

Scott = $\frac{1}{10}$ hour   Esther = 315 seconds   Dani = 3 mins 27 secs

How long did it take them in total?

What was the difference between the longest and shortest times?

**7** Brett, Annie, Aisha and Filip are going on holiday.

Here are the total lengths of their journeys.

| Brett | 12 hours longer than Filip |
|---|---|
| Annie | $1\frac{1}{4}$ days |
| Aisha | twice as long as Brett |
| Filip | 360 minutes |

Work out how many hours it took each person.

Place them in order from the shortest to the longest journey.

# Hours in a day

**1** Write the times of day in order of when they happen.

( afternoon ) ( morning ) ( midnight ) ( midday ) ( evening )

morning     midday     afternoon

evening      midnight

**2** Match the description to the correct number.

| | |
|---|---|
| months in a year | 5 |
| days in a week | 168 |
| hours in a day | 31 |
| days in a non-leap year | 7 |
| hours in a week | 24 |
| days in a school week | 365 |
| maximum number of days in a month | 12 |
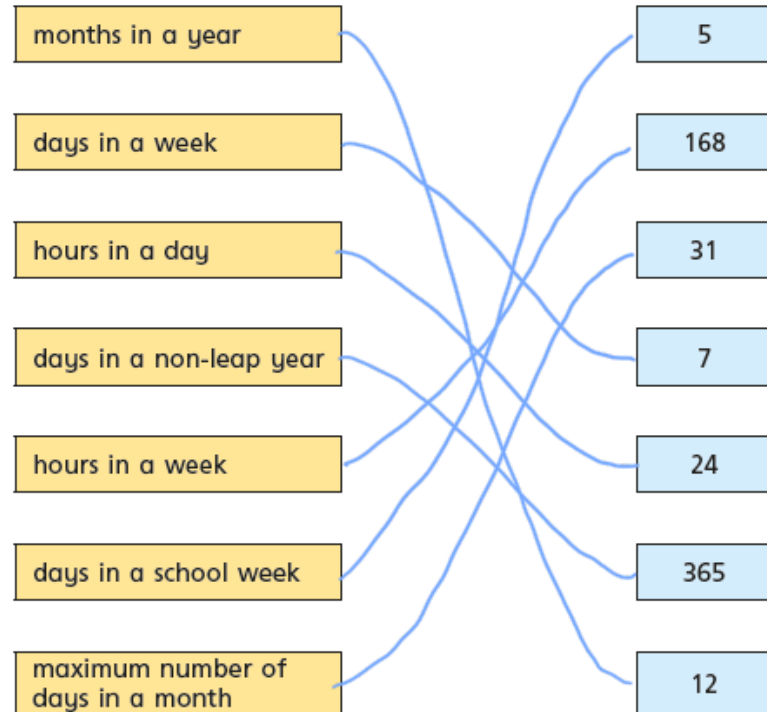
**3** Fill in the missing numbers.

a) 1 day = 24 hours

$\boxed{2}$ days = 48 hours

4 days = $\boxed{96}$ hours

$\boxed{40}$ days = 960 hours

41 days = $\boxed{984}$ hours

b) 1 week = 7 days

2 weeks = $\boxed{14}$ days

$\boxed{3}$ weeks = 21 days

60 weeks = $\boxed{420}$ days

63 weeks = $\boxed{441}$ days

**4** Aisha arrives home at 11 o'clock.

It must be nearly lunchtime.

Dora

It must be dark outside.

Amir

Who do you agree with? __Can't tell__

Explain your answer.

It depends whether it is 11 o'clock in the morning or at night.

**5** There are 5 days in a school week.

a) What is the difference in the number of days in 4 **school weeks** compared to 4 whole weeks?

$$8$$

b) There are 7 hours in a school day.

How many more hours are there in 5 full days than 5 school days?

$$85$$

Talk to a partner about how you worked out your answers.

**6** Kim and Dexter are working out how many more hours are in the month of August than September.

> I can work out how many hours are in August in total, how many hours are in September in total and subtract one from the other.

Kim thinks there is an easier way of working it out.

What might Kim's method be?

**7** Brett knows that there are 24 hours in one day, 48 hours in two days and 72 hours in three days.

Use these facts to work out how many hours there are in each month.

| | |
|---|---|
| April | 720 |
| January | 744 |
| February of a non-leap year | 672 |
| February of a leap year | 696 |

**8** There are more days in October than September.

Therefore, there are more school days in October than September.

Is this always, sometimes or never true?

(Depends on school holidays and weekends)

Sometimes

How do you know?

**9** Esther goes to school for 5 hours each day.

There are no school holidays in the month of March.

How many hours could Esther spend at school in March?

$$115$$

Compare answers with a partner.
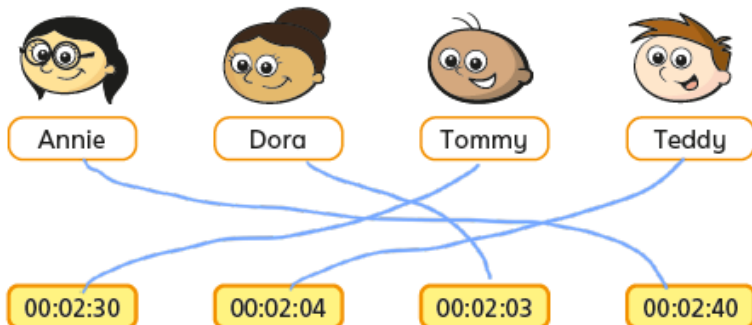
## Measuring time in seconds

White Rose Maths

**1** The table shows how long it took four children to run a race.

| Child | Time |
|-------|------|
| Annie | 2 minutes 40 seconds |
| Dora | 2 minutes 3 seconds |
| Tommy | 2 minutes 30 seconds |
| Teddy | 2 minutes 4 seconds |

a) Match each child to a time.

Annie      Dora      Tommy      Teddy

00:02:30      00:02:04      00:02:03      00:02:40

b) Using the fact that there are 60 seconds in one minute, write each child's time in seconds.

Annie  160  seconds        Tommy  150  seconds

Dora  123  seconds        Teddy  124  seconds

**2** Scott draws a bar model to help him convert 3 minutes and 17 seconds into seconds.

| 60 | 60 | 60 | 17 |
|----|----|----|----|

60 + 60 + 60 + 17 = 197

So 3 minutes and 17 seconds = 197 seconds

Talk to a partner about why Scott's method works.

**3** Complete the statements.

a) 2 minutes and 17 seconds = 137 seconds

b) 5 minutes and 12 seconds = 312 seconds

c) 4 minutes and 42 seconds = 282 seconds

d) 3 minutes and 19 seconds = 199 seconds

e) 6 minutes and 7 seconds = 367 seconds

f) 4 minutes and 21 seconds = 261 seconds

g) 654 seconds = 10 minutes and 54 seconds

**4** Write <, > or = to compare the times.

a) 1 minute and 23 seconds ( > ) 81 seconds

b) 2 minutes and 15 seconds ( = ) 135 seconds

c) 89 seconds ( < ) 1 minute and 34 seconds

**5**

> 327 seconds is the same as 3 minutes and 27 seconds.

Do you agree with Whitney? __No__

Why?

**6** How long does the roller coaster ride last in minutes and seconds?

The roller coaster ride lasts

[ 2 ] minutes and [ 17 ] seconds.

Duration
137 seconds

**7** Alex, Jack and Amir are doing a puzzle.

They want to know who did it the quickest.

> Alex: I did it in 152 seconds.

> Jack: I did it in 2 minutes and 42 seconds.

> Amir: I did it 10 seconds faster than Alex.

a) How long did each child take to complete the puzzle? Give your answer in seconds, and in minutes and seconds.

Alex [ 152 ] seconds [ 2 ] minutes and [ 32 ] seconds

Jack [ 162 ] seconds [ 2 ] minutes and [ 42 ] seconds

Amir [ 142 ] seconds [ 2 ] minutes and [ 22 ] seconds

b)

> Jack: I won because my time was highest!

Do you agree with Jack? __No__

Talk about it with a partner.

LEVEL 3 ANSWERS

**1** Sort the activities into the table depending on approximately how long each one takes to complete.

( travel to school )   ( wash and dry laundry )   ( get dressed )

( travel to the Moon )   ( watch a TV show )   ( listen to a song )

( eat a small chocolate bar )   ( sneeze )   ( write your name )

e.g.

| | |
|---|---|
| Less than 10 seconds | Sneeze  write your name |
| Less than 1 minute | eat a small chocolate bar |
| Less than 5 minutes | get dressed  listen to a song |
| Less than 1 hour | travel to school  watch a TV show |
| More than 1 hour | travel to the moon  wash and dry laundry |

**2** Complete the statements.

a) one minute = 60 seconds     b) 1 hour = 60 minutes

2 minutes = 120 seconds     5 hours = 300 minutes

4 minutes = 240 seconds     ten hours = 600 minutes

eighty minutes = 4,800 seconds     15 hours = 900 minutes

c) one day = 24 hours     d) 1 minute = 60 seconds

3 days = 72 hours     1 hour = 60 minutes

12 days = 288 hours     1 hour = 3,600 seconds

thirty days = 720 hours     2 hours = 7,200 seconds

How did you work this out? Talk about it with a partner.

**3** Write <, > or = to complete the statements.

5 minutes  ( > )  5 seconds

5 minutes  ( > )  50 seconds

5 minutes  ( < )  500 seconds

$\frac{1}{2}$ hour  ( < )  60 minutes

$\frac{1}{2}$ hour  ( > )  6 minutes

30 minutes  ( = )  $\frac{1}{2}$ hour

**4** Huan ran a race in 3.5 minutes.

Eva ran the race in 312 seconds.

Who was quicker?

_____Huan_____ was quicker.

How much quicker were they?

[1] minute [42] seconds quicker

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**5** The time is 10 past 3

Draw hands on the clocks to show what time it will be:

a) in 10 minutes

c) in 120 seconds

b) in 60 minutes

d) in 1.5 hours

**6** Scott, Esther and Dani timed how long it took to have a shower.

Scott = $\frac{1}{10}$ hour   Esther = 315 seconds   Dani = 3 mins 27 secs

How long did it take them in total?   | 882 | seconds

What was the difference between the longest and shortest times?

| 2 | minutes | 33 | seconds

**7** Brett, Annie, Aisha and Filip are going on holiday.

Here are the total lengths of their journeys.

| Brett | 12 hours longer than Filip |
| Annie | $1\frac{1}{4}$ days |
| Aisha | twice as long as Brett |
| Filip | 360 minutes |

Work out how many hours it took each person.

Place them in order from the shortest to the longest journey.

|  | Name | Time |
|---|---|---|
| shortest journey | Filip | 6 hours |
|  | Brett | 18 hours |
|  | Annie | 30 hours |
| longest journey | Aisha | 36 hours |