

Maths Activities

Revision links:

<https://www.bbc.co.uk/bitesize/topics/zkfycdm>

<https://nrich.maths.org/9027>

<https://mathsframe.co.uk/en/resources/resource/116/telling-the-time>

<https://www.bbc.co.uk/teach/class-clips-video/maths-ks2-using-timetables/zn2hy9q>

Warming up *

Q1.

A clock shows this time twice a day.



Tick the two digital clocks that show this time.

03:45

02:45

09:45

21:45

14:45

1 mark

Q2.

Liam hires a bike.

He has to return it by 3 pm.

The time is 2:25 pm.



How many minutes has he got left?

minutes

1 mark

Amy hires a bike for 45 minutes.

She takes the bike out at 3:30 pm.

At what time must she return the bike?

pm

1 mark

Q3.

Seb has to see the doctor at 10:05 am.

He gets to the doctor's surgery at 9:52 am.

How many minutes **early** is he?

minutes

1 mark

He leaves the doctor's surgery at 10:25 am.

He gets to school 45 minutes later.

What time does he arrive at school?

am

1 mark

Q4.

These are the opening times at Black Tower Castle.

Monday	Closed
Tuesday to Friday	11am to 6:30pm

Saturday	10am to 6pm
Sunday	10:30am to 4:30pm

How many hours is the castle open on Saturdays?

hours

1 mark

Alfie arrived at the castle at 5pm on a Thursday.

How long could he stay before closing time?

1 mark

Q5.



Holly takes **half an hour** to walk from home to school.

She arrives at school at 8:25am.

At what time did she leave home?

am

1 mark



Dev leaves school at half past three.

He arrives home at ten past four.

How many minutes did it take him to get home?

minutes

1 mark

Feeling confident **

Q6.

In March, Ken collects 2, 3 or 4 eggs each day from his hens.

In the first 20 days, Ken collects 57 eggs altogether.

There are 31 days in March.

What is the **greatest** number of eggs Ken can collect in March?

Show
your
method

eggs

2 marks

Q7.

Here is a rule for the time it takes to cook a chicken.

**Cooking time = 20 minutes plus an extra
40 minutes for each kilogram**

How many minutes will it take to cook a 3 kg chicken?

minutes

1 mark

What is the mass of a chicken that takes 100 minutes to cook?

kg

1 mark

Q8.

William wants to travel to Paris by train.

He needs to arrive in Paris by **5:30 pm**.

Circle the **latest time** that William can leave London.

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

1 mark

Q9.

Here is part of the bus timetable from Riverdale to Mott Haven.

Riverdale	10:02	10:12	10:31	10:48
Kingsbridge	10:11	10:21	10:38	10:55
Fordham	10:28	10:38	10:54	11:11

Tremont	10:36	10:44	11:00	11:17
Mott Haven	10:53	11:01	11:17	11:34

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?

minutes

1 mark

Mr Evans is at Fordham at 10:30

What is the **earliest** time he can reach Tremont on the bus?

1 mark

Q10.

Here is part of the morning bus timetable from Winton to Yansley.

Winton	9:35	9:55	10:15	10:35
Ingham	9:45	10:05	10:25	10:45
Carston	10:01	10:21	10:41	11:01
Dubley	10:23	10:43	11:03	11:23
Yansley	10:55	11:15	11:35	11:55

How many minutes does the bus take to get from Ingham to Dubley?

minutes

1 mark

Megan is in Carston.

She wants to be in Yansley before 11:30

What is the time of the latest bus she can take from Carston?

:

1 mark

What time does it get to Carston?

1 mark

Challenge ***

Q11.

A machine pours 250 millilitres of juice every 4 seconds.

How many **litres** of juice does the machine pour every **minute**?

Show your method

litres

2 marks

Q12.

The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?

Show
your
method

hours

2 marks

Q13.

Jack finished a sponsored run in 53 minutes 25 seconds.

Ally finished 3 minutes 50 seconds **after** Jack.

How long did Ally take?

min
sec

1 mark

Layla finished the run 8 minutes 45 seconds **before** Jack.

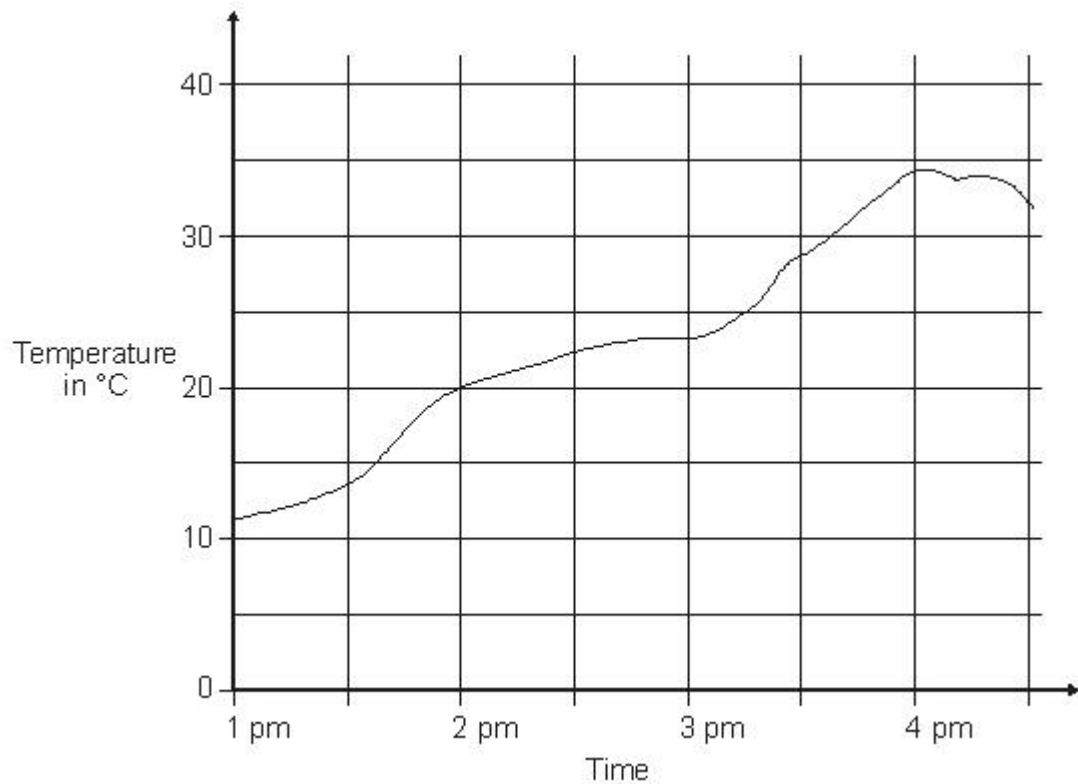
How long did Layla take?

min
sec

1 mark

Q14.

This graph shows the temperature in a greenhouse.



Use the graph to find the time when the temperature was 25°C.

1 mark

Use the graph to find the difference between the temperature at 2 pm and the temperature at 4 pm.

1 mark

Q15.



How many **days** old will the baby be when she has lived for **one million seconds**?

Show
your
method

days

2 marks

Mark schemes

Warming up answers *

Q1.

Both clocks ticked, as shown:



Accept alternative unambiguous positive indications, e.g. clocks circled or underlined.

[1]

Q2.

(a) 35

The answer is a time interval.

1

(b) 4:15

The answer is a specific time.

1

[2]

Q3.

13

The answer is a time interval

1

11:10

The answer is a specific time

1

[2]

Q4.

(a) 8 hours

The answer is a time interval

1

- (b) 1 hour 30 minutes
The answer is a time interval

1

[2]

Q5.

- (a) 7:55am
The answer is a specific time.

1

- (b) 40 minutes
The answer is a time interval.

1

[2]

Feeling confident answers **

Q6.

Award **TWO** marks for the correct answer of 101

If the answer is incorrect, award **ONE** mark for:

- sight of 44

OR

- evidence of appropriate method, e.g.
 - $31 - 20 = 11$
 $11 \times 4 + 57 =$

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2 marks

[2]

Q7.

- (a) 140
The answer is a time interval

1

- (b) 2

1

[2]

Q8.

The correct time circled as shown:

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

Accept alternative unambiguous positive indications, e.g.
14:01 ticked or underlined.

Accept 17:26 circled in addition to 14:01, provided no other
time is circled.

Do not accept only the arrival time 17:26 circled.

[1]

Q9.

- (a) 46

The answer is a time interval.

1

- (b) 10:44

The answer is a specific time.

1

[2]

Q10.

- (a) 38

The answer is a time interval.

1

- (b) 10:21

The answer is a specific time.

1

- (c) 10:58

1

[3]

Challenge answers ***

Q11.

Award **TWO** marks for the correct answer of 3.75

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- $60 \div 4 = 15$
- $250 \times 15 = 3750$
- $3750 \text{ ml} \div 1000 =$

OR

- $250 \div 4 = 62.5 \text{ ml per second}$
- $62.5 \times 60 = 3750$
- $3750 \text{ ml} \div 1000 =$

OR

- $60 \div 4 = 15$, so there are 15 lots of 4 seconds in 1 minute so there are 15 bottles per minute.
- There are 4 bottles in 1 litre
- $15 \div 4 =$

*Accept for **TWO** marks, 3,750 ml for final answer in working and the answer box blank **OR** 3,750 in the answer box where the litres has been replaced with millilitres.*

*Accept for **ONE** mark 3,750 litres (l) in the answer box **OR** the final answer in working and answer box blank.*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

Q12.

Award **TWO** marks for the correct answer of 1,408

OR

for an answer in the range of 1,406 to 1,409 inclusive.

If the answer is incorrect, award **ONE** mark for:

- sight of 1,392

OR

- evidence of an appropriate method, e.g.

- $24 \times 58\frac{2}{3} = \text{answer}$

Within an appropriate method, if a decimal equivalent for $\frac{2}{3}$ is given, it must be rounded or truncated to at least 2 decimal places.

- $24 \times 58 = 1,394$ (error)
- $\frac{2}{3}$ of 24 = 16

$$1,394 + 16 = \text{answer}$$

176

- $24 \times \frac{176}{3} = \text{answer}$
- $24 \times 58.67 = \text{answer.}$

*A final answer is required for the award of **ONE** mark.*

Up to 2m

[2]

Q13.

- (a) 57 min 15 sec

The answer is a time interval (see the guidance).

1

- (b) 44 min 40 sec

1

[2]

Q14.

- (a) Answer in the range 3:10 pm to 3:20 pm inclusive.

1

- (b) Answer in the range 13 degrees to 14 degrees inclusive.

The answer is a specific time (see page 5 for guidance).

1

[2]

Q15.

11 **OR** 12 **OR** any value between 11.5 and 11.6 inclusive

2

or

Any value between 277 and 288 inclusive seen (*value takes account of seconds in a minute and minutes in an hour*)

OR

Any value between 694 and 695 inclusive seen (*value takes account of hours in a day and either seconds in a minute or minutes in an hour*)

OR

Shows or implies a complete, correct method, eg:

- $1\,000\,000 \div 60 \div 60 \div 24$
- $1\,000\,000 \div 86\,400$
- $16\,666 \div 60 \div 24$

Do not accept place value errors in the value taken for one million in an otherwise correct method, eg:

$$100\,000 \div 60 \div 60 \div 24$$

1

