

# Year 4: Time

## Part 1

Years, months, weeks and days

### Warm-up

Talk through this question with an adult.

Use a calendar to help you.

There are \_\_\_\_ months in a year.

There are \_\_\_\_ days in February.

\_\_\_\_ months have 30 days, and \_\_\_\_ months have 31 days.

There are \_\_\_\_ days in a year and \_\_\_\_ days in a leap year.

Now, choose **Challenge 1** or **Challenge 2**.

w/b 20.4.20 Class 3's home learning: Maths (Year 4)

Do I understand the concept of years, months, weeks and days?

**Challenge 1:** There is no need to print out this page. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number too!

1) Draw this table in your maths book and fill in the blanks.

Number of days	Number of weeks
	5
49	
	12

2) Sally is 7 years and 2 months old.  
Macey is 85 months old.  
Who is the oldest?  
Explain your answer.

Do I understand the concept of years, months, weeks and days?

**Challenge 2:** There is no need to print out this page. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number and to explain in writing how you know.

- 1) Amir, Rosie and Jack describe when their birthdays are.

Amir says,



My birthday is in exactly two weeks.

Rosie says,



My birthday is in exactly 2 months.

Jack says,



My birthday is in 35 days.

Use the clues to work out when their birthdays are if today is the 8<sup>th</sup> June.


- 2) **Always, sometimes, never?**


There are 730 days in two years.


- 3) **True or false?**

- 3 days > 72 hours.
- $2\frac{1}{2}$  years = 29 months
- 11 weeks 4 days < 10 weeks 14 days

Amir, Rosie and Jack describe when their birthdays are.

Amir says,  My birthday is in exactly two weeks.

Rosie says,  My birthday is in exactly 2 months.

Jack says,  My birthday is in 35 days.

Use the clues to work out when their birthdays are if today is the 8<sup>th</sup> June.

Amir – 2 weeks is equal to 14 days so his birthday is 22<sup>nd</sup> June.  
 Rosie – 8<sup>th</sup> August  
 Jack – there are another 22 days left in June plus 13 in July, so his birthday is 13<sup>th</sup> July.

<p><b>Always, sometimes, never?</b></p> <p>There are 730 days in two years.</p>	<p>Sometimes – if both of the years are not leap years this is true. If one is a leap year then there will be 731 days in the 2 years.</p>
<p><b>True or false?</b></p> <ul style="list-style-type: none"> <li>• 3 days &gt; 72 hours.</li> <li>• <math>2\frac{1}{2}</math> years = 29 months</li> <li>• 11 weeks 4 days &lt; 10 weeks 14 days</li> </ul>	<p>False – 3 days is equal to 72 hours</p> <p>False - <math>2\frac{1}{2}</math> years is greater than 29 months</p> <p>True</p>

Year 4: Time


## Part 2

Analogue to digital: 12-hour format

Please choose **Challenge 1** or **Challenge 2**.

Can I convert between analogue and digital (12-hour format)?





**Challenge 1:** There is no need to print out this page. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number too!

- 1)  The time is \_\_\_\_\_ past 10  
This can also be written as \_\_\_\_ minutes past 10  
The digital time is \_\_\_\_ : \_\_\_\_

Write each of these times in the digital format.



- 2) Record the time of each activity in digital format.

Netball		p.m.	
Football		a.m.	
Rock climbing		p.m.	
Roller disco		a.m.	

- 3) Alfie looks at his digital watch and sees this time.  
What could he be doing at this time?

01:00 p.m.

Can I convert between analogue and digital (12-hour format)?

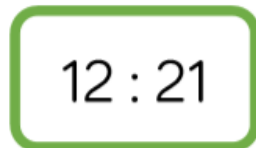
**Challenge 2:** There is no need to print out this page. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number and explain in writing how you know.

- 1) Annie converts the analogue time to digital format.  
Here is her answer.



Explain what Annie has done wrong.  
What should the digital time be?

2)



On a 12 hour digital clock, how many times will the time be read the same forwards and backwards?

3)

Jack arrives at the train station at the time shown in the morning.



Which trains could he catch?

Destination	Departs
York	07:10 a.m.
New Pudsey	09:25 a.m.
Bramley	09:42 a.m.
Leeds	10:03 a.m.

How long will Jack have to wait for each train?

Annie converts the analogue time to digital format.  
Here is her answer.



22 : 02

Explain what Annie has done wrong.  
What should the digital time be?

12 : 21

On a 12 hour digital clock, how many times will the time be read the same forwards and backwards?

Annie has recorded the minutes past the hour first instead of the hour.  
The time should be 02 : 22

Children can work systematically to work this out. For example, 12:21, 01:10, 02:20, 03:30 etc.

Jack arrives at the train station at the time shown in the morning.



Which trains could he catch?

Destination	Departs
York	07 : 10 a.m.
New Pudsey	09 : 25 a.m.
Bramley	09 : 42 a.m.
Leeds	10 : 03 a.m.

How long will Jack have to wait for each train?

Jack could catch the train to Bramley or Leeds.

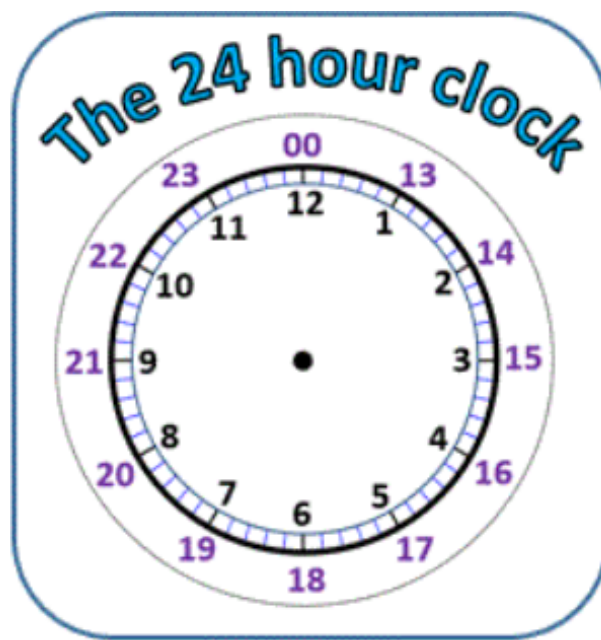
He would have to wait 7 minutes to go to Bramley and 28 minutes to go to Leeds.



# Year 4: Time

## Part 3

Analogue to digital: 24-hour format



















































w/b 20.4.20 Class 3's home learning: Maths (Year 4)

Can I convert between analogue and digital (24-hour format)?

For everyone...

Look at the following pictures and have a chat with an adult.

- What do you see? What do you notice?
- What is the same? What is different?

											
1 o'clock	2 o'clock	3 o'clock	4 o'clock	5 o'clock	6 o'clock	7 o'clock	8 o'clock	9 o'clock	10 o'clock	11 o'clock	12 o'clock
1 a.m.	2 a.m.	3 a.m.	4 a.m.	5 a.m.	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 p.m.
01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00
											
											
1 o'clock	2 o'clock	3 o'clock	4 o'clock	5 o'clock	6 o'clock	7 o'clock	8 o'clock	9 o'clock	10 o'clock	11 o'clock	12 o'clock
1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	12 a.m.
13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	00:00
											

Now, choose **Challenge 1** or **Challenge 2**.

w/b 20.4.20 Class 3's home learning: Maths (Year 4)

Can I convert between analogue and digital (24-hour format)?

**Challenge 1:** There is no need to print out the questions. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number too!

1) Copy this table into your maths book and then fill in the blanks.

24-hour digital	12-hour digital
06:10	
18:10	
21:12	
12:45	
00:45	

2) Does the following method always work? Write down some examples to explain your reasoning.

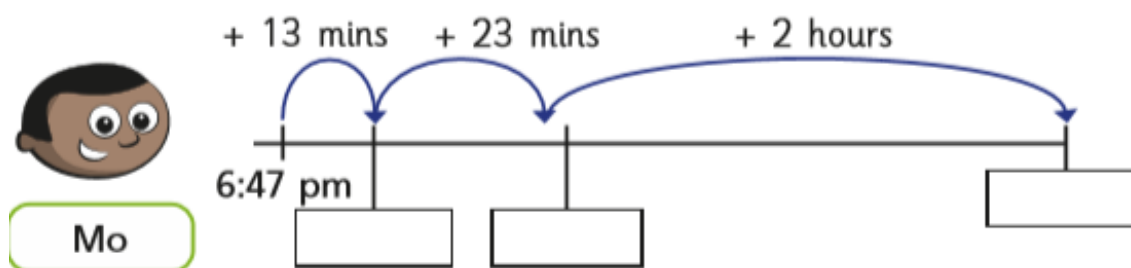
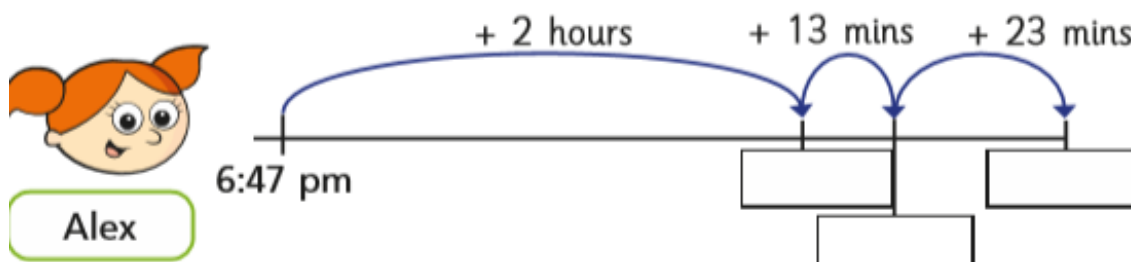
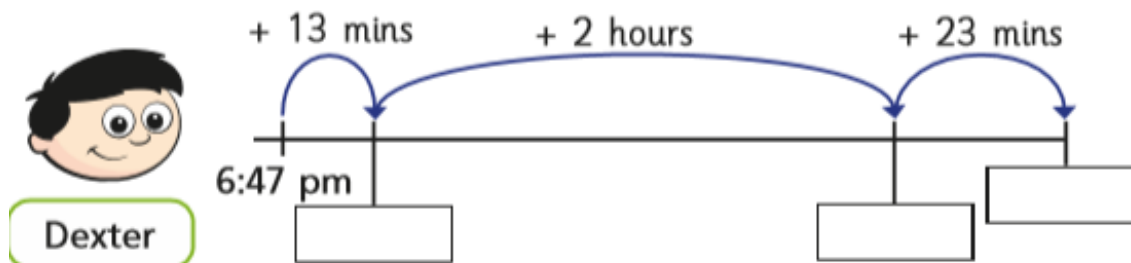


To change from 24-hour to 12-hour digital time, you just have to subtract 12 from the hours.

3) The time is 6:47 pm.

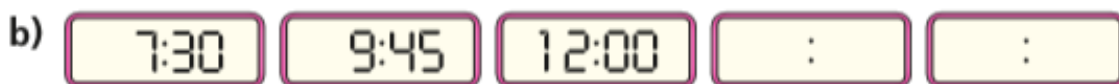
Dexter, Alex and Mo are using number lines to work out what time it will be in 2 hours and 36 minutes.

Fill in the missing times in 24-hour format.



Whose method do you prefer?

4) Complete the sequences by writing the next two times in 24-hour digital format.



Can I convert between analogue and digital (24-hour format)?

**Challenge 2:** There is no need to print out the questions. In your yellow maths book, write the short date you do the work and the above question, underlining them neatly with a ruler. Remember to write the question number and explain in writing how you know.

1) Write down some examples to explain your reasoning.

Jack says,



To change any time after midday from 12 hours to 24 hours digital time just add 12 to the hours

Will this always be true? Are there any examples where this isn't the case?

2) Nijah is delivering a parcel to her friend's house.

She leaves her house at



am.

She arrives at her friend's house at

11:50

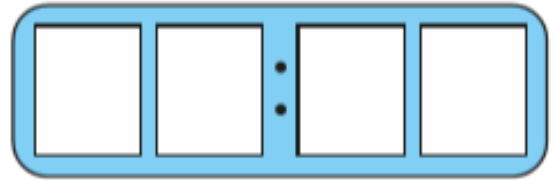
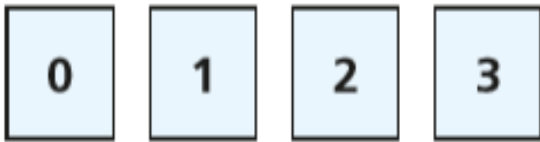
She leaves her friend's house at 11:55

If her return journey takes the same amount of time, what time will it be when she gets home?

Write your answer in 24-hour digital format.

<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>
----------------------	----------------------	---	----------------------	----------------------

3)



Using the digit cards once only each time, write five different times that can be shown on the 24-hour clock.

---

---

4) The time 15:51 is palindromic.

If you write the digits forwards or backwards the time will be the same.


Write five other times in the 24-hour digital format that are palindromic.

---

---

**True or False?** Analogue to digital - 24 hour

The time on the analogue clock could represent two different times on a digital clock.



White Rose Maths

The image shows a yellow analogue clock with a white face and black numbers. The hour hand is between 3 and 4, and the minute hand is pointing at 9. The clock has two yellow bells on top.

## Year 4: Time

### Part 4

#### Reading timetables

You will see there are two timetables activities. Choose to do one, both or a few questions from each.

There is no need to print either page out. In your maths book, please write the short date you complete the work, 'Timetables' and the page number (p.38 or p.39), underlining them neatly with a ruler. Remember to write the question number too!

Look at the timetable. Answer the children's questions.



Birmingham	Crewe	Pwllheli
9:30 am	11:35 am	4:50 pm
10:47 am	12:05 pm	6:10 pm
11:25 am	1:30 pm	6:55 pm

- Which is the quickest train to Crewe from Birmingham?
- What time do I leave Birmingham to get to Pwllheli before 5 o'clock?
- Which train is fastest from Crewe to Pwllheli?
- What is the latest I can leave Birmingham to be in Crewe before 1 o'clock?
- How long will it take to get from Crewe to Pwllheli if I take the 1:30 pm train?
- How long will it take to get from Birmingham to Pwllheli on the 10:47 train?



If each train is 10 minutes late, what are the new times?

- 7 It is the first day of Ian's life as an evacuee.

Work out and list how long each event lasts.

7. Getting up: 20 minutes

7:15	get up
7:35	breakfast
7:55	clean teeth
8:00	leave house
8:15	meet outside church hall
9:00	tour of village
9:50	visit school
10:30	tea in church rooms
12:00	go home



Work with a partner to write a timetable for your average school morning.



# Timetables

Time

C2

Look at the timetable. Answer the questions.



	Monday	Tuesday	Wednesday	Thursday	Friday
9:00	English	Maths	English	Maths	English
10:45					
11:10	Maths	History/Geography	Maths	Science	CDT
12:20					
1:30	Art	English	R E	English	PE / Music
3:00					

1 What time is Science?

2 On which days do we have Maths?

3 How many times in the week do we have English?

4 Which lessons start at 1:30?

5 Which lessons last  $1\frac{3}{4}$  hours?

6 Which are the longest lessons in the day? And the shortest?

7 How long do we spend doing English each week?

Work with a partner to write your own lesson timetable for the week.

3:00 go bowling  
 5:10 travel to cafe  
 5:20 start meal  
 6:45 travel to cinema  
 7:05 film starts  
 8:50 film ends

- 8 How long do we spend bowling?
- 9 Which part of the day takes longest?
- 10 How long do we spend travelling?
- 11 Which takes longer, the meal or the film?