Week beginning 1st February P6/5 Maths Planner

Home Learning Edition ☺
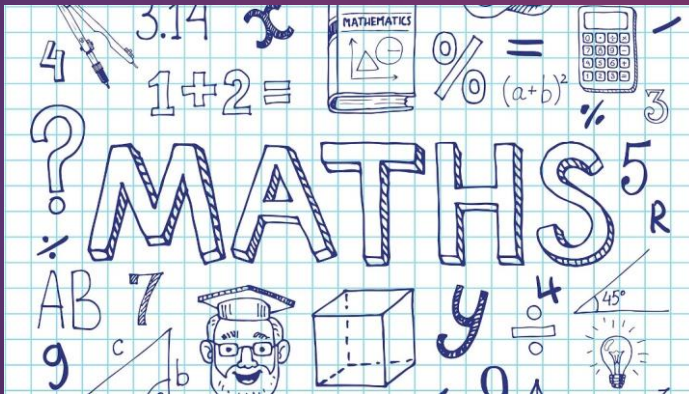
P6/5 Maths
What to expect!

- At the beginning of each week we will upload 3 PowerPoints into the January Home Learning folder on teams. Literacy, Numeracy and General.
- Teachers will be on hand to support throughout the school day.
- Teachers will host daily live meets at 9.35am and 1pm where they will talk through your task. These will be for help, support, check ins and fun will take place! Feel free to join whenever you can.
- You can work through the activities at your own pace, choosing activities you would like to complete ☺

#P6/5areoutofthisworld

Suggested Timetable

P6/5 Home Learning Suggested Timetable

	9:00-9:30	9:35-12:00	Lunch 12.00 - 1:00	1.00-2.00	2.00-3.00
Monday	Move your body! Joe Wicks or Just dance	MATHS		Topic	
Tuesday	Mindfulness (Off screen activity)	LITERACY		Topic	
Wednesday	Move your body! Joe Wicks or Just dance	MATHS		Topic	
Thursday	Mindfulness (Off screen activity)	LITERACY		RME/French	
Friday	Move your body! Joe Wicks or Just dance	MATHS LITERACY		Topic	

Your Teacher will be Live on Teams every day at 9:35am and 1pm
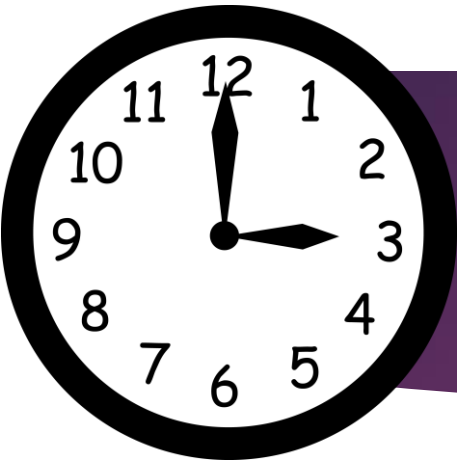
LI: to tell the time in a variety of different formats

(analogue, digital, 12 hour/24 hour)

Starter – Daily 5

Pyramids

1. 3372 ÷ 6
2. 2/7 of 63
3. 238 x 21
4. (13 x 9) + 231
5. 1403
   - 247

Cubes

1. 18 ÷ 3
2. $\frac{1}{4}$ of 24
3. 3 x 4
4. 6 x 3
5. 13
   - 7

Cuboids

1. 64 ÷ 4
2. 1/5 of 35
3. 7 x 6
4. 4 x 9
5. 245
   - 57

Spheres

1. 182 ÷ 7
2. 2/6 of 36
3. 224 x 6
4. 327 x 9
5. 513
   - 147
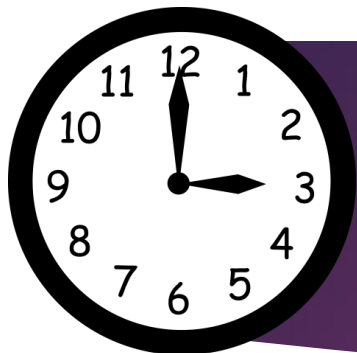
Time

Pyramids

Starter
Daily 5

Main Task
Teejay 2a
**Complete:
Q1 - Q6**

Finisher
Online Game
Options
(on the slide after pyramid's work)

Cubes

Starter
Daily 5

Main Task
Teejay 1a
Complete: Q1

Finisher
Online Game
Options
(on the slide after pyramid's work)

Cuboids

Starter
Daily 5

Main Task
Teejay 1a
**Complete:
Q3 and the Revisit-Review-Revise**

Finisher
Online Game
Options
(on the slide after pyramid's work)

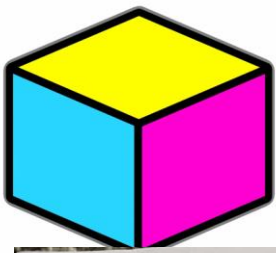## Spheres

Starter
Daily 5

Main Task
Teejay 1b
**Complete:
Q2, Q3, Q4**

Finisher
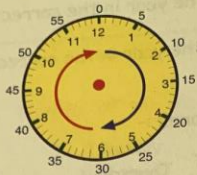Online Game
Options
(on the slide after pyramid's work)

Cubes

01.02.21

Telling the Time

Remember :- There are 60 minutes in an hour.

When the **big** hand is between the 6 and the 12 we say it is **to** the (next) hour.

When the **big** hand is between the 12 and the 6 we say it is **past** the (last) hour.
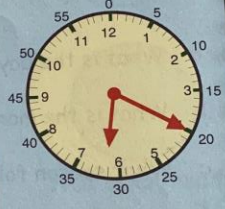
Be able tell the time from an analogue clock.

This clocks says
10 minutes past 7

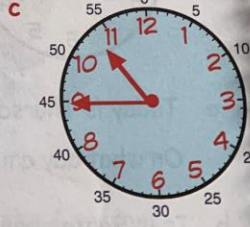This clocks says
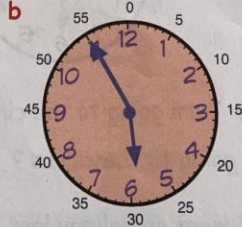**5 minutes to 2**
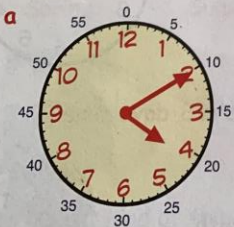
This clocks says
20 minutes past 6

Exercise 2

1. Write down the time on each clock :-

a   b   c

1. d e f
g h i
j k l
m n o
p q r

2. Draw some clock faces of your own.

Show the different times of the day when you do things.

Worksheet 11·3

cfE Book 1a - Chapter 11   this is page 101   Time 2
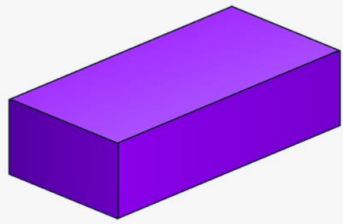
Cuboid

01.02.21

These clock times can be written in **two** ways.

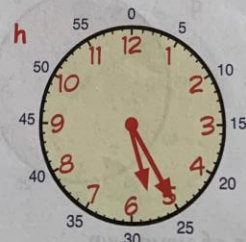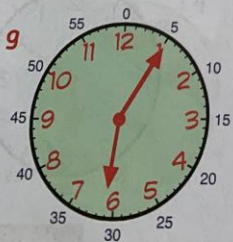9:10 or **ten past nine**

1:50 or **ten to two**

3. Write each of these times in **two** ways :-

a b c

d e f

g h i
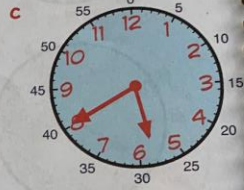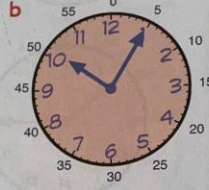
The 3 Я's   Revisit - Review - Revise

1. a Write the **days of the week** in order starting on Monday ....
   b Write the **months of the year** in order.

2. Write the time shown on each clock :-

a b c
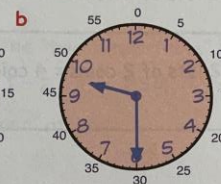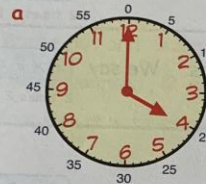
3. Write down the time on each clock **in 2 ways** :-
   (**Example** – *quarter past 8* or *8·15 pm*)

a b c
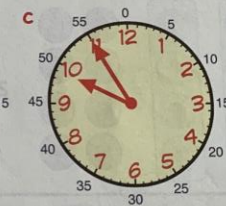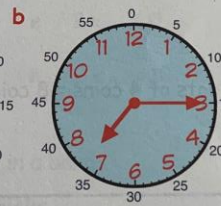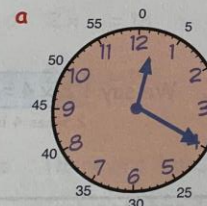
4. a What is the **5th** month of the year ?

   b Today is Tuesday. What day was it **3 days ago** ?

   c Today is Sunday. My birthday is in **6 days time**.
      When is my birthday ?

   d It is 1 o'clock in the afternoon. I arrived home **3 hours ago**.
      At what time did I arrive home ?

Left page:

g **2:30**   h **9:45**   i **11:15**

j **9:30**   k **1:15**   l **5:45**

2. For each clock below, **draw** a **digital clock** to show the **same** time :–

a   b   c

5:15   **7:....**   **:**

d   e   f
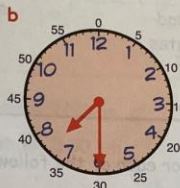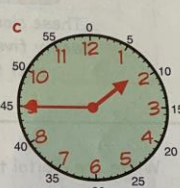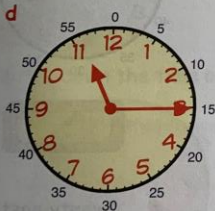
3. Write each time on a **digital clock** :–

a   half past **9**   b   quarter past **1**   c   quarter to **9**

d   quarter past **3**   e   quarter to **12**   f   half past **2**

g   quarter past **7**   h   quarter to **11**   i   half past **6**.

Worksheet 4·2

Right page:

Examples :–

2:25   **7:50**

These clocks read twenty five minutes past two.

These clocks read fifty minutes past seven.

This can also be read as ten minutes to eight.

4. Write the digital time for each of the following :–

a   b   c

:   **:**   **:**
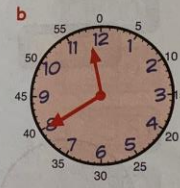
d   five past **3**   e   ten past **12**   f   twenty past **2**

g   quarter to **7**   h   half past **11**   i   six forty

j   nine fifty five   k   eleven twenty   l   three thirty

m   five to **6**   n   ten to **1**   o   twenty to **4**

p   twenty five to **1**   q   one minute to **2**   r   one minute to **8**

s   thirty three minutes past **3**.

12 & 24 Hour Time

Be able to read and write time using 12 and 24 clock
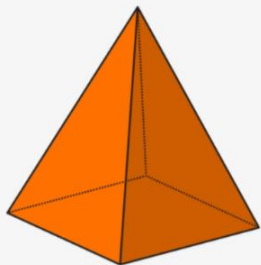
We usually think of the time of day in terms of midnight to noon, (ante-meridian - morning) and noon to midnight, (post- meridian - after noon/night), but pilots and sailors need a system that causes no confusion.

Imagine turning up for your plane to Tenerife at 7.00 (pm) to find it had flown away at 7.00 (am) and you missed your holiday !

The 24 hour Clock :-

12 hour times

morning (a.m.)   afternoon (p.m.)   evening (p.m.)

24 hour times

Example :- Can you see that morning times in 24 hour format stay almost the same ?

6.00 am	becomes	0600 hrs
8.45 am	becomes	0845 hrs
11.20 am	becomes	1120 hrs

But for afternoon and evening times, you always **add on 12 hours** :-

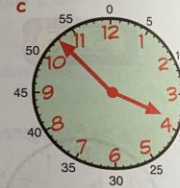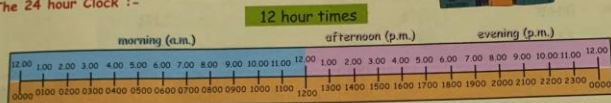|		
3.00 pm	becomes	1500 hrs	(3 hours past 12.00 o'clock)
6.15 pm	becomes	1815 hrs	(6.15 + 12.00)
10.40 pm	becomes	2240 hrs	(10.40 + 12.00)

Exercise 2

1. Change the following 12 hour clock times to **24 hour clock times** (eg 7.10 am —> 0710) :-

|					
a	8.40 am	b	3.55 am	c	5.00 am
d	3.30 pm	e	2.15 pm	f	8.00 pm
g	5.45 am	h	10.20 pm	i	4.35 am
j	9.55 am	k	noon	l	12.20 am
m	12.20 pm	n	9.30 pm	o	7.55 am
p	11.30 pm	q	11.32 pm	r	7.36 am
s	10.58 pm	t	11.19 am	u	8.48 pm
v	2.01 am	w	2.01 pm	x	midnight.

2. When changing 12 hour pm times –> 24 hour clock you needed to *add on* 12. Suggest how you might change from 24 hour –> 12 hour **pm** clock times.

3. Change the following 24 hour clock times to **12 hour clock times** (remember **am** and **pm**) :-

a	0330	b	1150	c	0910
d	1535	e	1750	f	2235
g	0230	h	1835	i	2040
j	1902	k	1200	l	0750
m	0445	n	1625	o	2325
p	2205	q	0050	r	0305
s	1135	t	1940	u	2348.

4. Write each of these times in 12 hour clock time **and** in 24 hour clock time :-

a   b   c
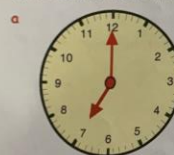
alarm clock goes off   home from school   thinking about bed
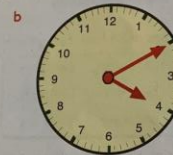
d **2:05**   e **3:05**   f **8:05**
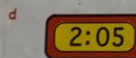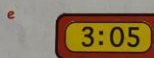
during the night   football match kicked off   ready to leave for school

5. a   The US Airways plane left New York at 9.50 pm and touched down at Gatwick at 5.35 am. Write these times in 24 hour form.

b   One evening in April, the sun set at 2115 and rose the following morning at 0525. Write these times in 12 hour form.

6. Katie had three appointments in her notebook. She *arrived* at the hospital at 9.20 am, the optician at quarter to one and her lawyer at 4.05 pm

a   For each appointment write whether she was on time or she was late.

b   How many minutes late or early was she for each appointment ?

Hospital 0925 hrs
Optician 1248 hrs
Lawyer 1615 hrs
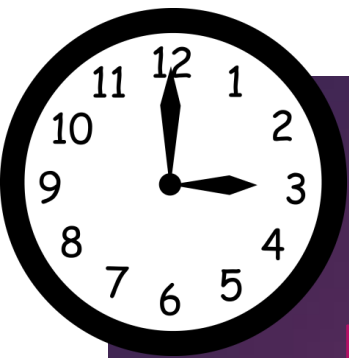
Time

25.01.21

Online Game Finishers

https://www.topmarks.co.uk/Flash.aspx?f=matchingpairstimev3

https://www.sheppardsoftware.com/math/time/clock-splat-game/

https://mathsframe.co.uk/en/resources/resource/261

https://mathsframe.co.uk/en/resources/resource/118/adding_time_word_problems#

http://www.scootle.edu.au/ec/viewing/L9643/index.html
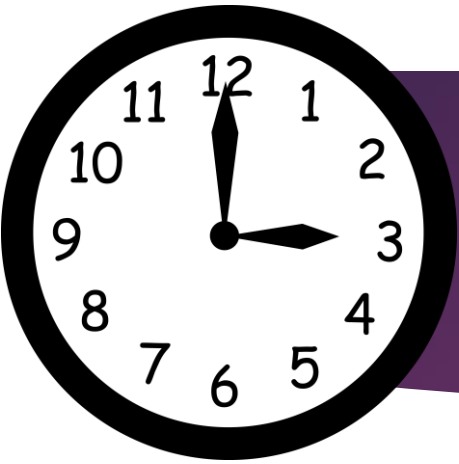
LI: to calculate the length of time it takes between two intervals

Starter

Morning Challenge

A security door has a code using the digits 2, 0, 1 and 7.

How many different combinations of these digits could there be to open the door?

How can you be sure that you have found all the combinations?
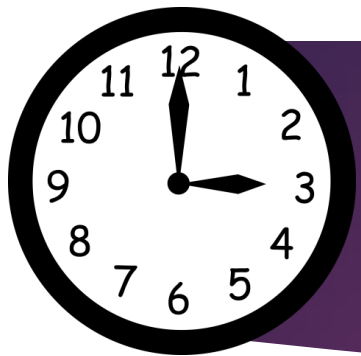
Working out a time interval means:

Being given two different times and calculating the length of time in between the two.
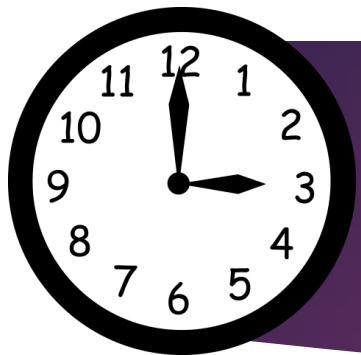
Time
Simple Time Intervals

Let's do these together...

1. I start my homework at 7.15pm and finish it at 7.30pm.
How long does it take me to do my homework?

2. I go swimming at 9.45am. I swim for half an hour.
What time is it when I finish swimming?

3. I leave the house at 3.05pm. It takes me 42 minutes to walk to my friend's house.
What time do I arrive at her house?
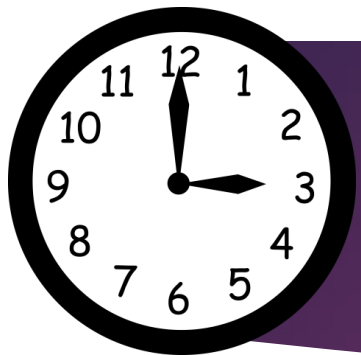
Time

03.02.21

Pyramids

Starter
Morning Challenge

Main Task
Teejay 2a pg. 31 Short Time Intervals (full exercise)

Finisher
Time Question on the next slide – verbally record yourself or type out why.

Cubes

Starter
Morning Challenge

Main Task
Time Intervals Worksheet – drawing the hands on the clock

Finisher
Time Question on the next slide – verbally record yourself or type out why.

Cuboids

Starter
Morning Challenge

Main Task
Teejay 1b Simple Time Intervals pg.40

Challenge: Timetables pg. 41 Q1 & Q2

Finisher
Time Question on the next slide – verbally record yourself or type out why.

Spheres

Starter
Morning Challenge

Main Task
Teejay 1b: pg 42 Q3-5

Challenge: Teejay 2a pg. 31 Q1-Q3

Finisher
Time Question on the next slide – verbally record yourself or type out why.
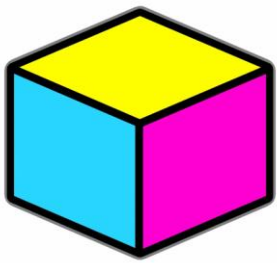
Name: _____ Date: _____

Time Intervals

Jake leaves home at 4 o'clock. It takes an hour for Jake to get to his Gran's house. What time will he get there?

Mum puts a cake in the oven at 1 o'clock. It takes an hour to bake. What time will it be ready?
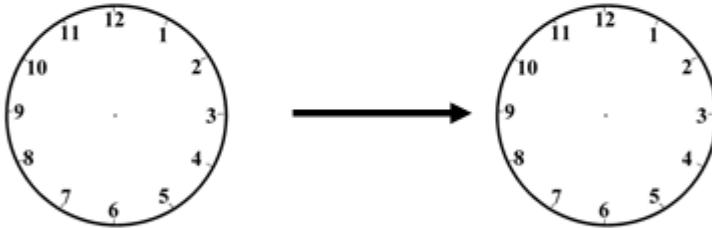
I start to watch TV at 7 o'clock. The programme lasts one hour. What time will it finish?
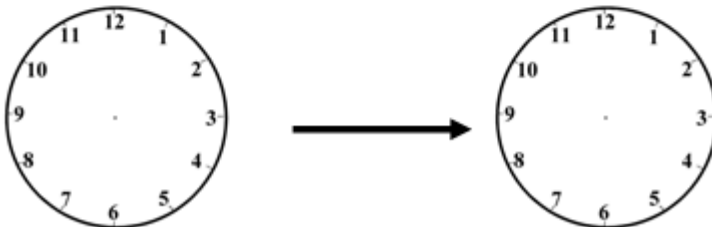
I go for a walk at half past 3. It takes me one hour. What time do I come back?
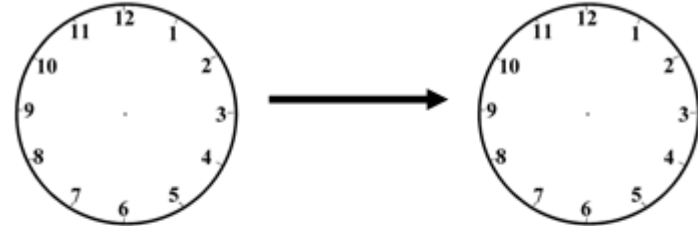
A Maths lesson starts at half past 9. It lasts for one hour. What time does it finish?
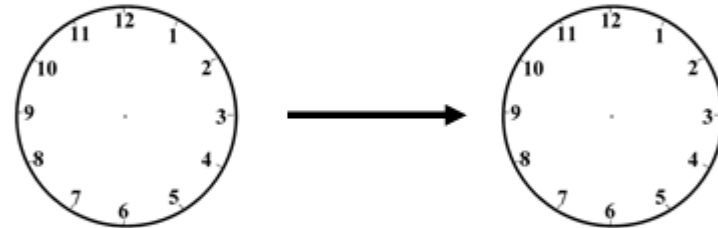
A family go out for a meal at 6 o'clock. They are out for 2 hours. What time do they get home?

Challenge
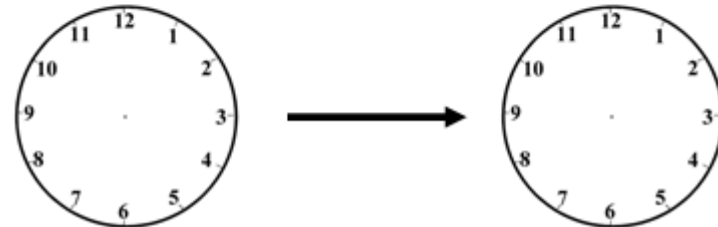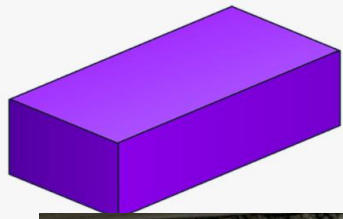
Exercise 3 — Simple Time Intervals — Extension

Be able to find simple time intervals

1. a How many **hours** is it from **2 o'clock** to **5 o'clock**?

   b How many **hours** is it from **3 o'clock** to **8 o'clock**?

   c How many **hours** is it from **12 o'clock** to **3 o'clock**?

   d How many **hours** is it from **5 o'clock** to **11 o'clock**?

2. a How many **hours** is it from **half past 3** to **half past 5**?

   b How many **hours** is it from **half past 6** to **half past 11**?

   c How many **hours** is it from **quarter past 2** to **quarter past 7**?

   d How many **hours** is it from **6:15 am** to **11:15 am**?

   e How many **hours** is it from **5:20 pm** to **10:20 pm**?

   f How many **hours** is it from **10:55 am** to **3:55 pm**?

3. The bus station clock is shown.

   1:30

   a What time does the clock read?

   b My bus leaves at **quarter to two**.
   How many **minutes** until my bus leaves?

   c Jack's bus leaves in **45 minutes** time.
      At what time does his bus leave?

   d The bus to town leaves in **1 hours and 30 minutes** time.
      At what time does the bus to town leave?

CfE Book 1b - Chapter 4

page 40

Time 1

Reading Simple Timetables

Be able to interpret simple timetables.

Shown is the 23 bus timetable.

Airdrie	10:45 am
Falkirk	11:25 am
Stirling	11:59 am
Perth	12:20 pm
Dundee ↓	1:05 pm

The bus is at Airdrie at "**quarter to 11 in the morning**".
The bus is at Falkirk at "**twenty five minutes past 11 in the morning**".

Exercise 4

1. Look at the timetable above.
   Write the other 3 bus times out fully **in words**.

2. Look at the train timetable below.

| Aberdeen | → | Glasgow | → | Leeds | → | Luton | → | London |
| 9·55 am | | 12·05 am | | .... | | | | 5·40 pm | .... |

   a At what time did the train leave **Aberdeen**?

   b At what time was the train at **Glasgow**?

   c The train arrived at Leeds at **10 past 3** in the afternoon.
      Write this time (*using am/pm*).

   d Write out in words when the train was at **Luton**.

   e The train journey ended in London
      at **ten to seven** at night.
      Write this time (using am/pm).

CfE Book 1b - Chapter 4   page 41   Time 1

Spheres

03.02.21

Challenge

3. Eric and his dad arrived at the show at 6·50 pm. Were they late or early?

Tonight's show is at ¼ to 7

4.

EASY-AIR Flight Departures	
Malaga	10:55 am
Palma	11:40 am
Barcelona	12:35 pm
Ibiza	1:05 pm
Tenerife	2:50 pm
Nice	3:20 pm

Amy's mum is checking her flight times. Her plane to Malaga leaves at 5 to 11 in the morning.

Write the other departure times in a similar way.

5. Stacey was looking at Channel 6's T.V. programmes for Tuesday.

a Royal Ascot is on at 25 past 3 in the afternoon.

Write out the times of the following programmes fully in a similar way :–

(i) Count-Up
(ii) Away And Home
(iii) Sports Roundup
(iv) News In Brief

CHANNEL 6

3:05	Olivio (R)
3:25	Royal Ascot
3:50	Count-Up (game show)
4:15	Ace Adventura (film)
5:25	Away And Home
5:50	Tea-Time News
6:25	Scottish Report
7:05	Seven–Alive
7:35	Sports Roundup
8:00	BIG SISTER (live)
8:50	News In Brief
9:00	Pyjama-Banana (film)

b Stacey was watching Channel 6 at 5 past 4. Which programme must she have been watching?

c Which programmes are showing on Channel 6 at :–

(i) 5:35 pm (ii) 7:50 pm (iii) ¼ past 8 at night?

CfE Book 1b - Chapter 4

Short Time Intervals

Be able to calculate basic time intervals

Counting on :– The easiest way of finding how long something lasts is by "counting on".

Example :– A TV programme starts at 7.45 pm and ends at 10.25 pm. How long did it last?

Answer :–

| 2 hours | + | 15 mins | + | 25 mins | = 2 hrs 40 mins |
7.45 pm → 9.45 pm → 10.00 pm → 10.25 pm

or

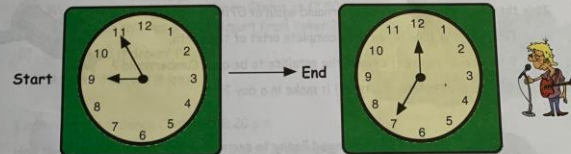| 15 mins | + | 2 hrs | + | 25 mins | = 2 hrs 40 mins |
7.45 pm → 8.00 pm → 10.00 pm → 10.25 pm

Exercise 3

1. How long is it from :– (show which method you used to "count on" in obtaining your answer)

a 3.05 pm to 6.05 pm
b 10.00 am to 12.30 am
c midday to 5.30 pm
d 8.30 pm to 11.35 pm
e 7.55 am to 9.25 am
f 4.40 am to 10.15 am
g 0820 to 1025
h 1855 to 2020
i 1950 to 2105
j 2240 to 0300 (next day).

2. Calculate the finishing times of the following films :–

	Film A	Film B	Film C	Film D	Film E
Start Time	3.30 pm	5.45 pm	8.35 pm	11.35 am	11.30 pm
Show lasted	2 hr 30 mins	2 hr 40 mins	2 hr 45 mins	55 mins	3 hr 45 mins

3. The two clocks show when a gig started and finished one Saturday evening.

Start → End

For how long did the gig last?

4. Ian Fraser set off on the Greenock Marathon at 10.35 am. He arrived at the finish line at 2.14 pm. How long had Ian taken to run the marathon?

CfE Book 2a - Chapter 4   this is page 31   Time

Short Time Intervals

Be able to calculate basic time intervals

Counting on :– The easiest way of finding how long something lasts is by "counting on".

Example :– A TV programme starts at 7.45 pm and ends at 10.25 pm. How long did it last ?

Answer :–

| 2 hours | + | 15 mins | + | 25 mins | = | 2 hrs 40 mins |

7.45 pm → 9.45 pm → 10.00 pm → 10.25 pm

or

| 15 mins | + | 2 hrs | + | 25 mins | = | 2 hrs 40 mins |

7.45 pm → 8.00 pm → 10.00 pm → 10.25 pm

Exercise 3

1. How long is it from :– (*show which method you used to "count on" in obtaining your answer*)

   a   3.05 pm to 6.05 pm   b   10.00 am to 12.30 am

   c   midday to 5.30 pm   d   8.30 pm to 11.35 pm

   e   7.55 am to 9.25 am   f   4.40 am to 10.15 am

   g   0820 to 1025   h   1855 to 2020

   i   1950 to 2105   j   2240 to 0300 (next day).

2. Calculate the **finishing times** of the following films :–

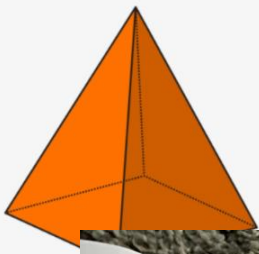|	Film A	Film B	Film C	Film D	Film E
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   For how long did the gig last ?

4. Ian Fraser set off on the Greenock Marathon at 10.35 am. He arrived at the finish line at 2.14 pm.

   How long had Ian taken to run the marathon ?

CfE Book 2a - Chapter 4   this is page 31   Time

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5. Shown is part of the bus timetable from Malton to Highrose.

	Malton →	Lugton →	Blythe →	Fenton →	Highrose
Early Bus	7.10 am	8.20 am	10.30 am	11.15 am	2.00 pm
Late Bus	11.05 am	12.15 am			5.55 pm

   a   How long does the early bus take to travel from :–

      (i) Malton to Lugton   (ii) Blythe to Fenton   (iii) Malton to Highrose ?

   b   Assuming that the late bus travels at the same speed as the early bus, when would it be expected to arrive at :–

      (i) Blythe   (Hint ! Notice how long the early bus takes from Lugton to Blythe)

      (ii) Fenton ?

6. A cargo ship leaves Dunbar Harbour at 4.48 am and does not reach its destination till quarter to 6 at night.

   For how long had the ship been at sea ?

7. A plane leaves Edinburgh Airport at 2150 on Thursday. It touches down in Mexico at 0735 (British time) on Friday.

   a   How long did the flight take ?

   On the flight back the plane took the same flight time and left at 0840 (British Time).

   b   At what time did the plane arrive at Edinburgh ?

8. A satellite circles the earth. At 0335 it is directly above Cumbernauld. It is then found to be above Cumbernauld again at 0710.

   a   Calculate the time taken for 1 complete orbit of the earth.

   b   When would you next expect the satellite to be over Cumbernauld ?

   c   How many **complete** orbits will it make in a day ?

9. Joe challenged Penny to see who could paint one side of the fence surrounding the village green quicker.

   Joe started his side at 1045 and completed his task at 1305.

   Penny began to paint the other side at 1350 and finished at 1505.

   Who was quicker and by how many minutes ?

CfE Book 2a - Chapter 4   this is page 32

More Dif

Exercise

1.   A Su

   a

   b

   c

   d

   e

   f

2.
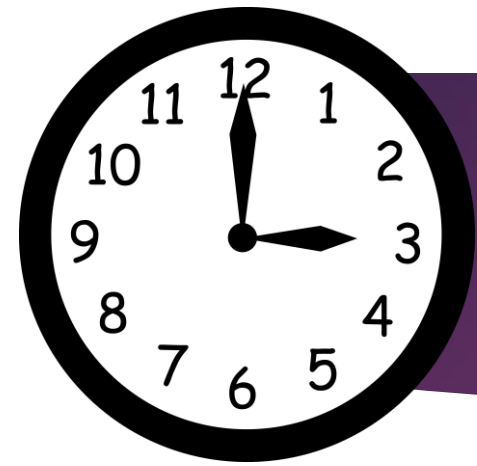
Why do you think time goes faster when you are having fun, but seems to slow down when you are doing something that is not fun?

LI: to develop
- basic modelling skills
- your skills in testing and analysing result

Friday 5th February

STEM Challenge

Introduction

In this task you will need to **build**, **test** and **improve** different paper airplane designs.

Model testing tells Engineers how a design responds in different circumstances, in this case you will see how your model reacts to different air conditions and aircraft shapes.

Using small models guides engineers to discard prototypes that do not work, saving both time and money.

Success Criteria
(steps to success):

I can:

• create at a paper models of 3 different aeroplanes to use in experiments

• test and record the flight distance of each design in the tables provided

• take pictures of your models, attach them to your PowerPoint and submit via Microsoft Teams

You will need:
A4 Paper or Card
A straight edge (optional to help with neat folds)
A phone or camera to take pictures and upload

Steps...

Create
You can design your own aeroplanes or follow the guides found on this website:
https://www.foldnfly.com/#/1-1-1-1-1-1-1-1-2

Fly
Fly each design three times, recording the distance and the length of time in the air, for each attempt.

Upload a picture of each of your designs.

Evaluate
Complete the evaluation questions.

Plane 1

Plane 1	Distance	Time in air (seconds)
Attempt 1		
Attempt 2		
Attempt 3		
Average		

Plane 2

Plane 2	Distance	Time in air (seconds)
Attempt 1		
Attempt 2		
Attempt 3		
Average		

Plane 3

Plane 3	Distance	Time in air (seconds)
Attempt 1		
Attempt 2		
Attempt 3		
Average		

Evaluations

Evaluation 1

What design travelled the furthest, and why do you think this happened?

Evaluation 2

What design spent the longest time in the air, and why do you think this happened?