Suggested homework task

Year 5

Parental guidance

Pupils complete, read and interpret data presented in charts, including timetables. They solve a range of problems using data presented in this way including calculating time intervals using both the 12 hour and 24 hour clock.

Worked example

Data charts can take many forms but their purpose is to allow information to be easily understood. Their organisation and layout is designed to display data in an organised way.

There is often confusion between rows and columns which can lead to difficulties when talking about and describing charts. Making connections to other meanings of the words can help pupils recall that rows are horizontal (rows of houses, rows of flowers) and columns are vertical (like the pillars that hold up buildings).

Rows are horizontal

Columns are vertical

Doric   Ionic   Corinthian

Reading and completing timetables

A timetable is a table of information showing when things will happen. Reading and interpreting timetables is a useful life skill that can be put to use in a range of practical situations.

Pupils should be exposed to timetables in different orientations.

London St Pancras	06:18	07:01	08:31	09:22	10:01
Ashford International	06:55	-	-	09:55	-
Paris Gare du Nord	09:47	10:17	11:47	12:47	13:17

Calculating time intervals

To complete the information on this timetable, the information available needs to be read and interpreted and then intervals of time need to be calculated. Representing these calculations on empty number lines can help keep track of the steps.

Train times from London to Edinburgh		
Depart	Arrive	Duration
09:30	14:13	
10:00		4h 20m
	16:22	5h 39

For the train leaving at 09:30, what is the duration of the journey?

+ 30 mins   + 2 hours   + 2 hours   + 13 mins

09:30   10:00   12:00   14:00   14:13
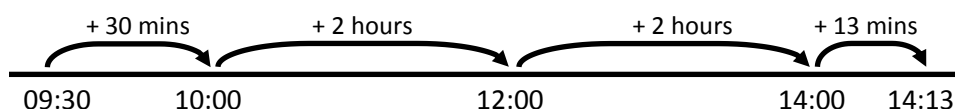
I need to find the difference between 09:30 am and 2:13 pm. I could count forwards or backwards.

At what time did the last train on the chart leave London?

I need to work out what time it was 5 hours and 39 minutes before 4:22 pm. I will jump back to work it out.

- 17 mins   - 22 mins   - 5 hours

10:43   11:00   11:22   16:22
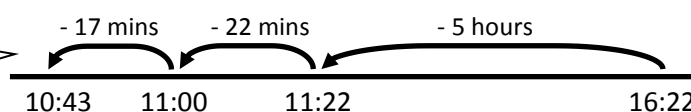
Suggested activities:

Make use of the many opportunities to use table, charts and timetables. Create timetables for your daily or weekly routines. Look at timetables and bus stops and train stations. Use online websites together to book real or imaginary journeys, exploring the different route options and times available.

1) This table shows the flight details of an athlete attending the Olympics. Calculate time intervals using a number line to show the steps taken.

Direction	Departs		Arrives	
Outbound	11:20	5th Aug	??:??	5th Aug
	London		Rio de Janeiro	
Return	23:00	25th Aug	12:10	26th Aug
	Rio de Janeiro		London	

a) The outbound plane journey lasted 8 hours and 25 minutes. At what time did the plane arrive?

```
_____
11:20
```

The plane arrives at [   ]

b) How long was the return flight from Rio de Janeiro to London?

```
_____
23:00
```

The journey lasted [hours   minutes]

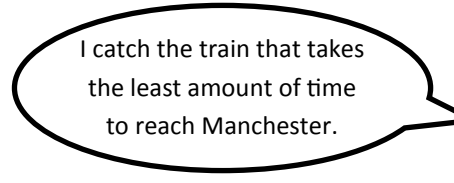2) This is the timetable for a train service that runs between London and Manchester via Birmingham.

London	08:37	08:58	09:22	09:45	10:08	
Birmingham	09:59	10:23	-	11: 08	-	
Manchester	11:02	11:25	11:39	12:52	12:33	

a) I catch the 08:37 train from London to Manchester. How long is my journey?

b) I catch the train that takes the least amount of time to reach Manchester.

c) Write this train in the last column of the timetable:

I arrive in Manchester at 13:42 having been on the train for 2 hours and 15 minutes.

Next Step for Depth

A bus leaves the depot every 17 minutes starting at 06:15.

What time does the fourth bus leave?

What time does the tenth bus leave?