16 Time 2

A This chart shows information about daylight in Dublin and Reykjavik on certain days.

		1st Jan	1st Apr	1st Jul	1st Oct
Dublin, Ireland	Hours of Daylight	7 hours 36 minutes	13 hours 3 minutes	16 hours 53 minutes	11 hours 33 minutes
Reykjavik, Iceland	Sunrise	11:19	06:45	03:06	07:37
	Sunset	15:44	20:19	23:55	18:55

1. Estimate which dates on the chart Dublin has more hours of daylight than Reykjavik.
2. Estimate which dates on the chart Reykjavik has more hours of daylight than Dublin.
3. Calculate to check your estimates.

Think about how you can calculate time intervals.

B This chart shows the tide times at different locations.

		Galway	Wexford	Wicklow
14 Aug	↑ High	00:22	00:34	06:55
	↓ Low	05:56	07:01	12:44
	↑ High	12:57	13:04	19:32
	↓ Low	19:41	19:34	

Estimate when the next high tide will be at each location.

C There are approximately 6 hours between the first low tide and the second high tide at each location.

Do you agree with Blaze? Explain your thinking.

Look at the chart in Part A. Work out the difference in hours of daylight between the two locations for each of the 4 months.

Measures: Time
Interpret and describe information provided in timetables and schedules.

Slides 16.1

A

This ferry schedule shows sailings from Dublin and Rosslare.

Route	Operating	Departure Times	
Dublin to Cherbourg	M, W, Th, Su	09:30	
Rosslare to Fishguard	Tu, F, Sa	11:05	
Dublin to Pembroke	Tu, Sa	14:20	
Rosslare to Pembroke	M, W, F	13:50	18:10
Dublin to Holyhead	Every day except Su	11:35	15:05
Rosslare to Cherbourg	M, Tu, Th	10:10	13:40

1. Use the schedule to answer these questions.
   - a. If you were in Dublin on a Saturday, where could you go?
   - b. If you needed to go to Cherbourg on a Tuesday, which ferry port would you depart from?
   - c. If you arrive in Rosslare at 10:15 a.m. on a Tuesday to get the ferry to Fishguard, how long will you have to wait?
2. Write three more 'If you ...' questions about the ferry times for your partner to answer.

This chart shows the work schedules for four different teams.

Key
☼ = day shift ☾ = night shift

Team	Days 1–7	Days 8–14	Days 15–21	Days 22–28
A	☾ ☾ ☾ ☾	☼ ☼ ☼ ☾ ☾ ☾ ☾	☼ ☼ ☼ ☼	
B	☼ ☼ ☼ ☾ ☾ ☾	☼ ☼ ☼ ☼		☾ ☾ ☾ ☾
C	☼ ☼ ☼ ☼		☾ ☾ ☾ ☾	☼ ☼ ☼ ☾ ☾ ☾
D		☾ ☾ ☾ ☾	☼ ☼ ☼ ☾ ☾ ☾	☼ ☼ ☼ ☼

B

Use the schedule above to answer these questions.

1. What is Team B doing on Day 7?
2. What is Team C doing on Day 20?
3. What is Team D doing on Day 16?
4. What is each team doing on Day 22?
5. How many teams are off work on Day 3?
6. Which days are Teams A and D both at work?

C

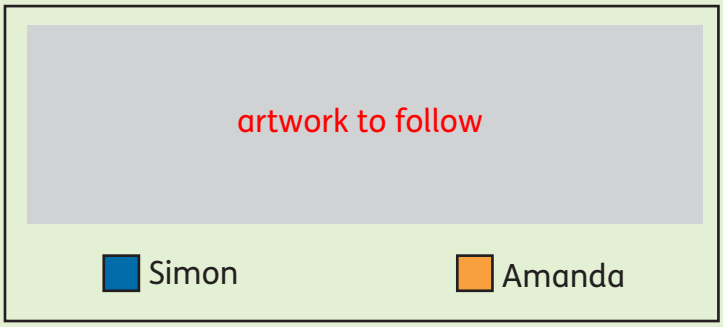
Use the schedule above to work out if these statements are true or false.

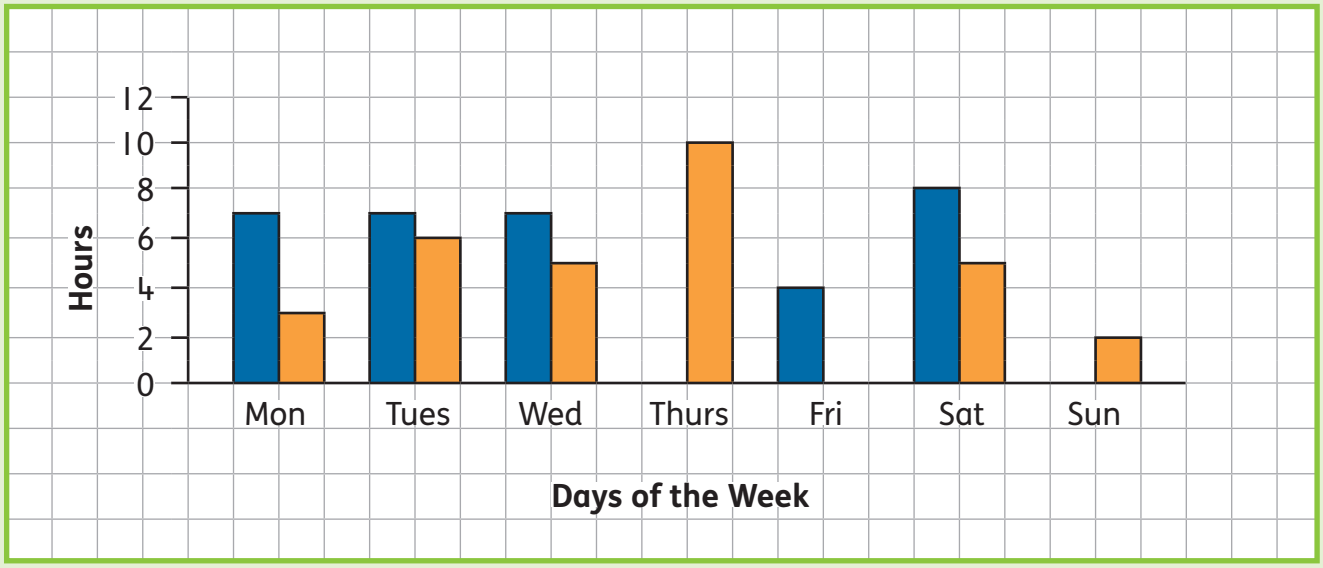
1. After a set of day shifts, teams have 7 days off before starting a set of night shifts.
2. Each team works on $\frac{1}{2}$ of the number of days in each 28-day cycle.
3. In each 28-day cycle, each team spends $\frac{1}{4}$ of the number of days working a night shift.
4. Team A works more day shifts than the other three teams in each 28-day cycle.

Write three questions about the work schedule for a partner to answer.

Simon and Amanda work in a café.

This multiple bar chart shows how many hours they work each day of the week.





A Use the multiple bar chart above to help you complete these sentences.

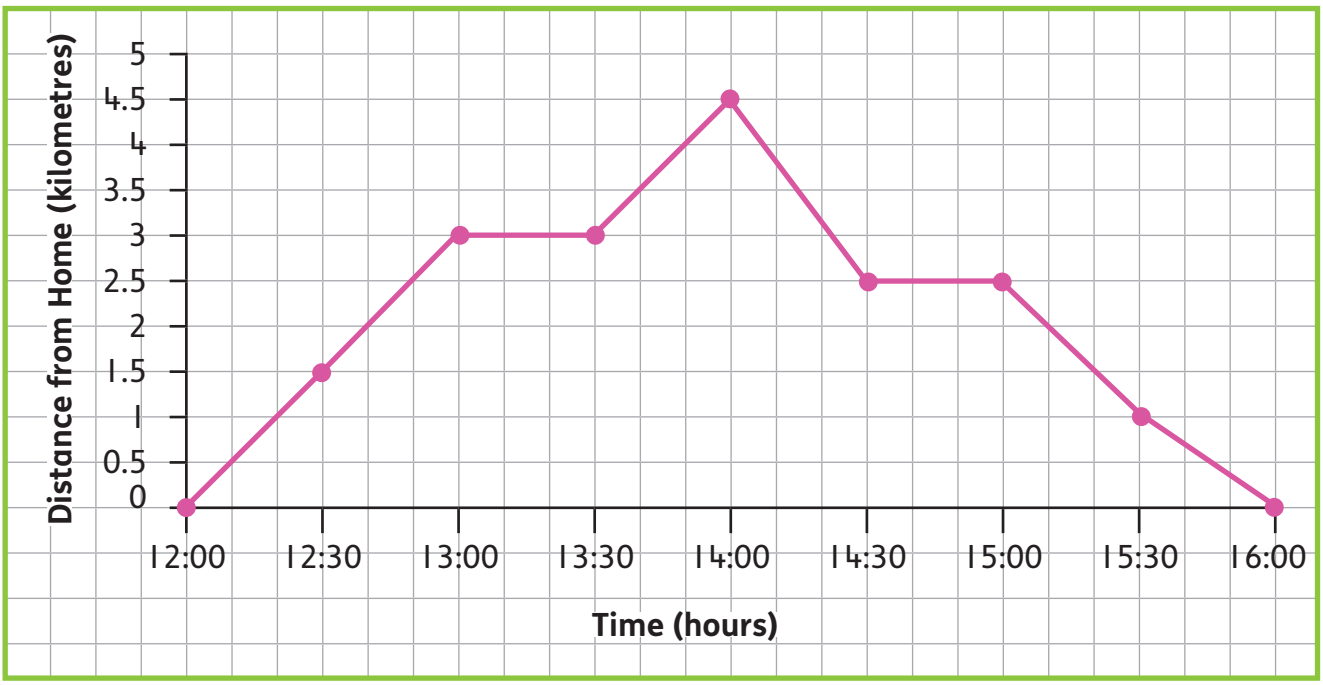
1. _____ works more hours over the week.
2. _____ works on more days over the week.
3. The day of the week with the longest shift is _____.
4. The day of the week with the shortest shift is _____.
5. _____ has 2 days off per week.

B Use the multiple bar chart above to decide if each of these statements are *always*, *sometimes* or *never* true.

1. Simon's shifts are the same length.
2. Amanda's shifts are the same length.
3. Simon's shifts are more than 5 hours.
4. Amanda's shifts are 10 hours or fewer.
5. Simon and Amanda work the same length shift on the same day.
6. On weekdays, Simon works exactly 2 hours fewer than Amanda.

Write three statements about the multiple bar chart above that are false.

A This line graph shows how far Megan travelled away from home in one afternoon.



Use the line graph to help you complete these sentences.

1. Megan was away from home for ____ hours.
2. The furthest distance Megan was away from home was ____ kilometres.
3. At 1p.m. Megan was ____ kilometres away from home.
4. On her way back, Megan was 1 kilometre away from home at ____ p.m.
5. At approximately ____ and ____ she was 2 kilometres away from home.
6. At 2.15p.m. Megan was approximately ____ kilometres away from home.

artwork to follow

B This table shows the results of the Women's Olympic Cross-Country Mountain Bike race.

2008	2012	2016	2020	2024
Spitz	Bresset	Rissveds	Neff	Ferrand-Prevot
01:45:11	01:30:52	01:30:15	01:15:46	
26·7 km	29·3 km	29·7 km	20·6 km	30·8 km

Estimate the missing time. Explain your thinking.

Use the table in Part B to work out the difference in time and the difference in distance between:

1. 2008 and 2012
2. 2012 and 2016
3. 2016 and 2020

A This chart shows the times of sunrise and sunset in Dublin on the 1st of every month.

Dublin	1st Jan	1st Feb	1st Mar	1st Apr	1st May	1st Jun	1st Jul	1st Aug	1st Sep	1st Oct	1st Nov	1st Dec
Sunrise	08:40	08:10	07:11	06:57	05:50	05:03	05:01	05:42	06:35	07:27	07:24	08:17
Sunset	16:16	17:07	18:03	20:01	20:55	21:43	21:55	21:19	20:13	19:00	16:51	16:10

1. Record two months where there are only 2 minutes in the difference between the times the sun rises.
2. Record a month where the sun sets later than it does in August.
3. Record a month where the sun rises earlier than it does in April.
4. Record three consecutive months where the sunrise is getting later.
5. Record three consecutive months where the sunset is getting later.
   How many possible answers are there?

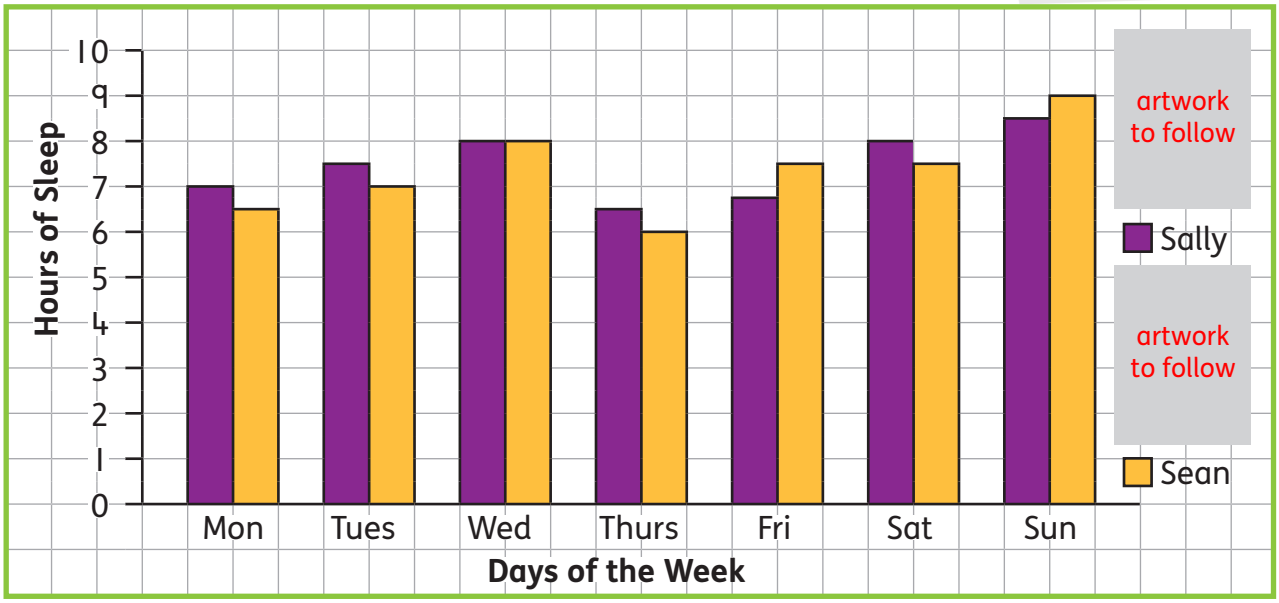
B

Friday		Saturday	
15:10	Cartoon	3:00 p.m.	Sport
15:15	Film	3:45 p.m.	Film
16:40	Cookery Show	5:05 p.m.	Local News
17:20	Documentary	5:15 p.m.	Weather
18:00	National News	5:25 p.m.	Cartoon
18:30	Local News	5:30 p.m.	National News
18:50	Weather	5:55 p.m.	Documentary
18:55	Drama	6:35 p.m.	Travel show

Use the TV schedules above to answer these questions.

1. How much earlier does the local news start on Saturday than on Friday?
2. How much later does the documentary start on Saturday than on Friday?
3. On which day does the film last longer?
4. How much longer are the news programmes shown on Friday than on Saturday?
5. Which is longer: the cookery show or the sports programme? By how many minutes?
6. Write your own question about these TV schedules.

A



Use the multiple bar chart above to work out if these statements are true or false.

1. Sally slept for longer than Sean on 4 days.
2. Sally slept for longer than Sean across the whole week.
3. Sean slept for fewer than 7 hours on Monday.
4. The number of hours that Sean slept decreased over the week.
5. Sean and Sally slept for an equal amount of time on Saturday and Sunday.
6. Sean and Sally both slept for more than 50 hours over the week.

B

This table shows the results of the Men's Olympic 20 km Walk.

	Gold	Silver	Bronze
Rio 2016	01:19:14	01:19:26	01:19:37
Tokyo 2020	01:21:05	01:21:14	01:21:28
Paris 2024	01:18:55	01:19:09	01:19:11

Use the results to help you complete these sentences.

1. The three numbers in each section of the table represent hours, ☐ and seconds.
2. The difference between the silver medal time and bronze medal time in 2024 was ☐ seconds.
3. The gold medal winner in 2024 was ☐ minuets and ☐ seconds faster than the gold medal winner in 2020.
4. The difference between the quickest and slowest times in the table is ☐ minutes and ☐ seconds.
5. The smallest difference between a gold medal time and a bronze medal time happened in the year ☐.