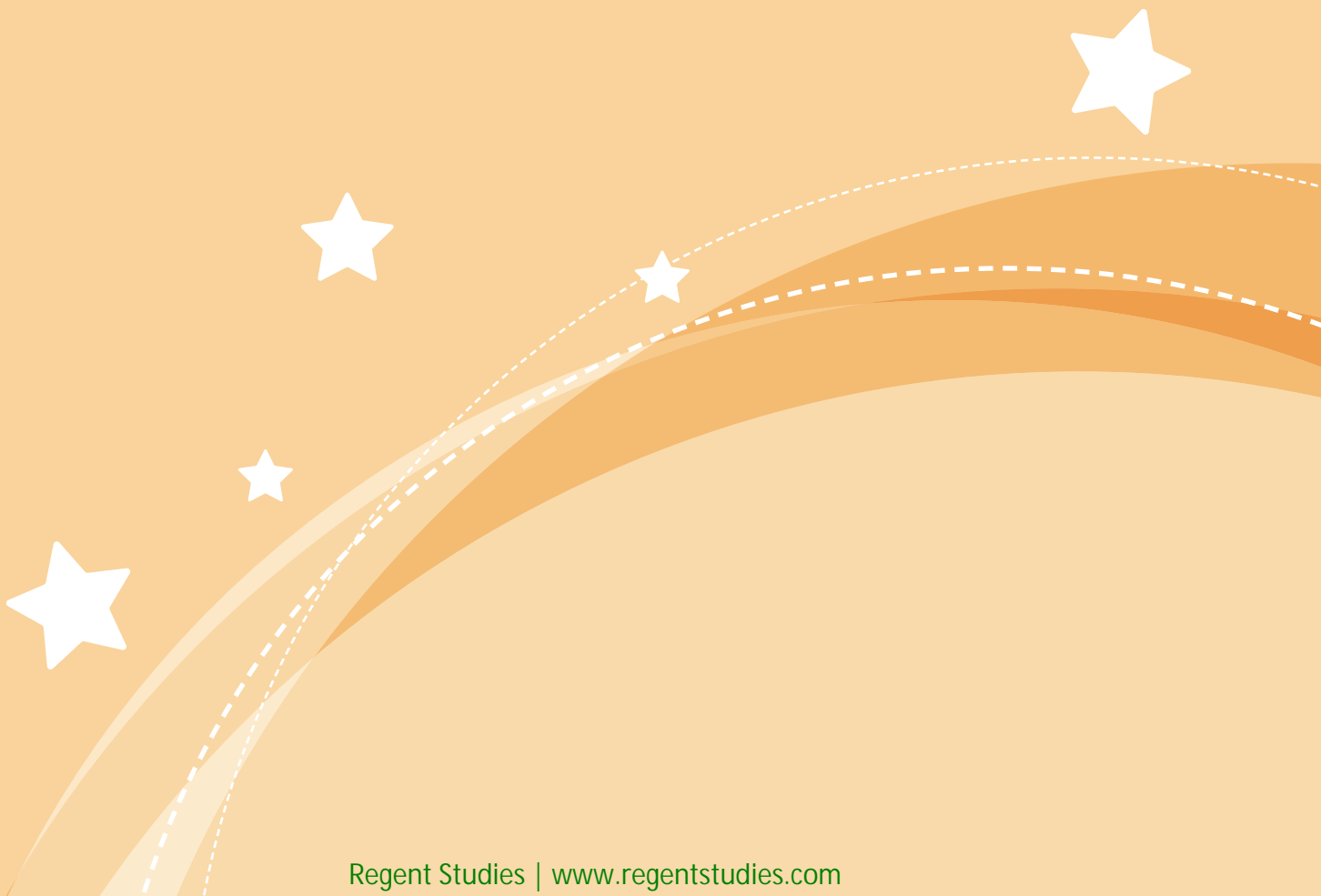




Mathematics Guide





A Day Out

I can calculate the duration of events.



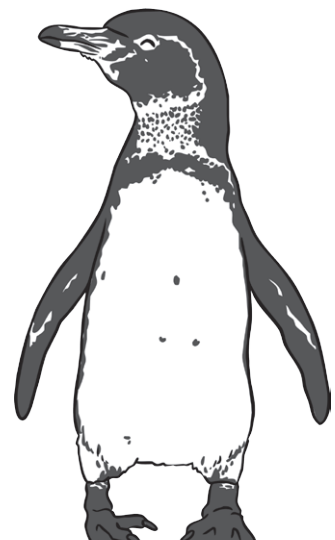
- 1) Angelina and her family went for a day out at the zoo. Here is their timetable for the day. Calculate the time taken for each event and fill in the column in the table.

Start time	End time	Event	Time taken
8:25 a.m.	10:20 a.m.	journey to the zoo	
10:20 a.m.	11:32 a.m.	looking at the animals	
11:32 a.m.	12:05 p.m.	elephant talk	
12:05 p.m.	1:53 p.m.	lunch	
1:53 p.m.	2:40 p.m.	visiting the petting zoo	
2:40 p.m.	3:17 p.m.	gift shopping	
3:17 p.m.	3:50 p.m.	feeding the penguins	
3:50 p.m.	5:12 p.m.	journey back home	

- 2) Calculate how long these combinations of events lasted. Show your working out.

a) Elephant talk and lunch.

b) Gift shopping and feeding the penguins.



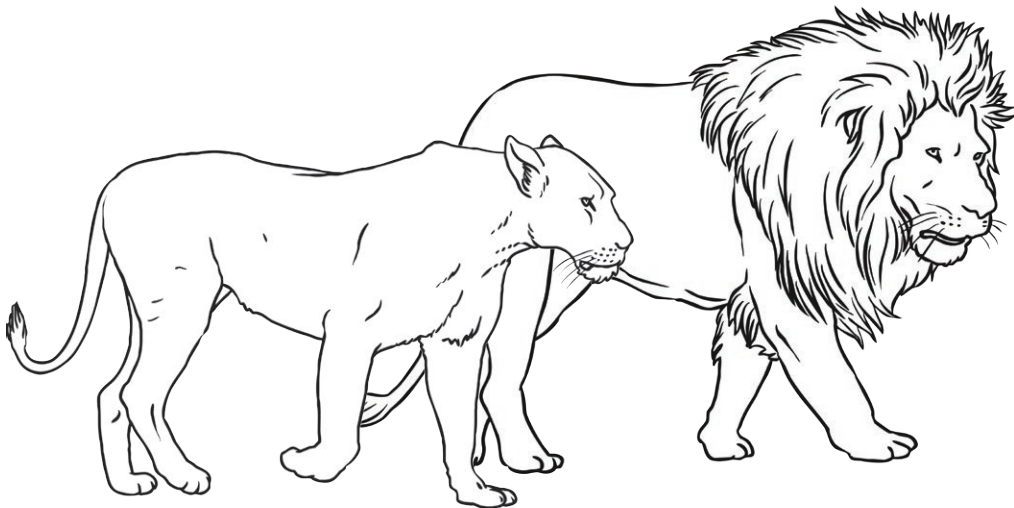


c) Looking at the animals and the elephant talk.

d) Travelling to the zoo and travelling home.

3) What was the total duration of the whole day out?

4) Which lasted longer:
looking at the animals and the elephant talk or visiting the petting zoo and
gift shopping?





A Day Out Answers

Question	Answer			
1. Calculate the time taken for each event and fill in the column in the table.				
	8:25 a.m.	10:20 a.m.	journey to the zoo	1 hour 55 minutes
	10:20 a.m.	11:32 a.m.	looking at the animals	1 hour 12 minutes
	11:32 a.m.	12:05 p.m.	elephant talk	33 minutes
	12:05 p.m.	1:53 p.m.	lunch	1 hour 48 minutes
	1:53 p.m.	2:40 p.m.	visiting the petting zoo	47 minutes
	2:40 p.m.	3:17 p.m.	gift shopping	37 minutes
	3:17 p.m.	3:50 p.m.	feeding the penguins	33 minutes
	3:50 p.m.	5:12 p.m.	journey back home	1 hour 22 minutes
2. Calculate how long these combinations of events lasted. Show your working out.				
a.	2 hours 21 minutes			
b.	1 hour 10 minutes			
c.	1 hour 45 minutes			
d.	3 hours 17 minutes			
3. What was the total duration of the whole day out?				
	8 hours 47 minutes			
4. Which lasted longer: looking at the animals and the elephant talk or visiting the petting zoo and gift shopping?				
	Looking at the animals and the elephant talk			



A Day Out

I can calculate the duration of events.



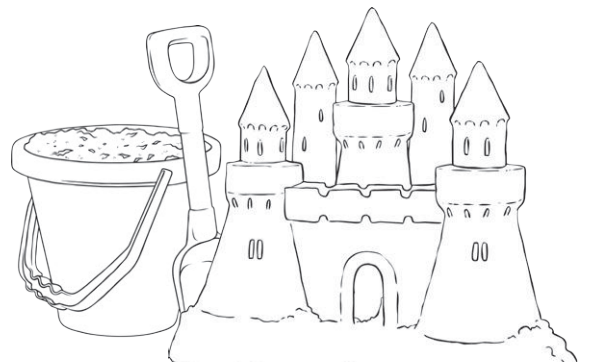
- 1) Jonathan and his family went for a day out at the seaside. Here is their timetable for the day. Calculate the time taken for each event and fill in the column in the table.

Start time	End time	Event	Time taken
8:30 a.m.	10:30 a.m.	journey to the seaside	
10:30 a.m.	11:15 a.m.	walk along the beach	
11:15 a.m.	12:00 noon	building sandcastles	
12:00 noon	1:10 p.m.	lunch	
1:10 p.m.	2:00 p.m.	swimming in the sea	
2:00 p.m.	3:10 p.m.	gift shopping	
3:10 p.m.	3:45 p.m.	final time on beach	
3:45 p.m.	5:15 p.m.	journey back home	

- 2) Calculate how long these combinations of events lasted. Show your working out.

a) Building sandcastles and lunch.

b) Final time on the beach and journey back home.





c) Swimming in the sea and gift shopping.

d) Walk along the beach and building sandcastles.

3) What was the total duration of the whole day out?



A Day Out Answers

Question	Answer			
1. Calculate the time taken for each event and fill in the column in the table.				
	8:30 a.m.	10:30 a.m.	journey to the seaside	2 hours
	10:30 a.m.	11:15 a.m.	walk along the beach	45 minutes
	11:15 a.m.	12:00 noon	building sandcastles	45 minutes
	12:00 noon	1:10 p.m.	lunch	1 hour 10 minutes
	1:10 p.m.	2:00 p.m.	swimming in the sea	50 minutes
	2:00 p.m.	3:10 p.m.	gift shopping	1 hour 10 minutes
	3:10 p.m.	3:45 p.m.	final time on beach	35 minutes
	3:45 p.m.	5:15 p.m.	journey back home	1 hour 30 minutes
2. Calculate how long these combinations of events lasted. Show your working out.				
a.	1 hour 55 minutes			
b.	2 hours 5 minutes			
c.	2 hours			
d.	1 hour 30 minutes			
3. What was the total duration of the whole day out?				
	8 hours 45 minutes			



A Day Out

I can calculate the duration of events.



- 1) Amina and her family went for a day out at the theme park. Here is their timetable for the day. Calculate the time taken for each event and fill in the column in the table.

Start time	End time	Event	Time taken
8:20 a.m.	10:25 a.m.	journey to the theme park	
10:25 a.m.	11:35 a.m.	looking at the exhibits	
11:35 a.m.	12:10 p.m.	going on the rides	
12:10 p.m.	1:55 p.m.	lunch	
1:55 p.m.	2:40 p.m.	gift shopping	
2:40 p.m.	3:20 p.m.	riding the tourist train	
3:20 p.m.	3:55 p.m.	final time on rides	
3:55 p.m.	6:10 p.m.	journey back home	

- 2) Calculate how long these combinations of events lasted. Show your working out.

a) Journey to the theme park and looking at the exhibits.

b) Final time on the rides and journey back home.





c) Looking at the exhibits and going on the rides.

d) Riding the tourist train and final time on the rides.

3) What was the total duration of the whole day out?

4) Which lasted longer:
going on the rides and lunch or gift shopping and riding the tourist train?





A Day Out Answers

Question	Answer			
1. Calculate the time taken for each event and fill in the column in the table.				
	8:20 a.m.	10:25 a.m.	journey to the theme park	2 hours 5 minutes
	10:25 a.m.	11:35 a.m.	looking at the exhibits	1 hour 10 minutes
	11:35 a.m.	12:10 p.m.	going on the rides	35 minutes
	12:10 p.m.	1:55 p.m.	lunch	1 hour 45 minutes
	1:55 p.m.	2:40 p.m.	gift shopping	45 minutes
	2:40 p.m.	3:20 p.m.	riding the tourist train	40 minutes
	3:20 p.m.	3:55 p.m.	final time on rides	35 minutes
	3:55 p.m.	6:10 p.m.	journey back home	2 hours 15 minutes
2. Calculate how long these combinations of events lasted. Show your working out.				
a.	3 hours 15 minutes			
b.	2 hours 50 minutes			
c.	1 hour 45 minutes			
d.	1 hour 15 minutes			
3. What was the total duration of the whole day out?				
	9 hours 50 minutes			
4. Which lasted longer: going on the rides and lunch or gift shopping and riding the tourist train?				
	Going on the rides and lunch			

Measurement: A Day Out

Aim: Compare durations of events (for example, to calculate the time taken by particular events or tasks). I can calculate the duration of events.	Success Criteria: I can calculate the amount of time that passes between one time and another. I can add durations to find the total time taken by combinations of events.	Resources: Lesson Pack Whiteboards and pens - class set Dice - per pair
	Key/New Words: Time, compare, hours, minutes.	Preparation: Differentiated A Day Out Activity Sheet - 1 per child

Prior Learning: It will be helpful if children can use digital times with a.m. and p.m. (covered in Time Problems (Lesson 1): Using A.M. and P.M.).

Learning Sequence

	Digital Times with A.M. and P.M.: Children convert the times written on the Lesson Presentation into digital times using a.m. and p.m. They write their responses on whiteboards.				
	Timetable for a Day Out: The Lesson Presentation shows a timetable for a day out at a museum. Children calculate the duration of each event, then answer questions about combining and comparing durations. The Lesson Presentation models strategies for answering these questions.				
	A Day Out: Children complete the differentiated A Day Out Activity Sheets , answering questions about combining and comparing events. <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"> Children calculate the duration of events recorded in digital times in ten and fifteen-minute intervals. They compare sets of events, saying which last the longest. </td> <td style="width: 33%; border: none;"> Children calculate the duration of events recorded in digital times in five-minute intervals. They compare sets of events, saying which last the longest. </td> <td style="width: 33%; border: none;"> Children calculate the duration of events recorded in digital times. They compare sets of events, saying which last the longest. </td> </tr> </table>	Children calculate the duration of events recorded in digital times in ten and fifteen-minute intervals. They compare sets of events, saying which last the longest.	Children calculate the duration of events recorded in digital times in five-minute intervals. They compare sets of events, saying which last the longest.	Children calculate the duration of events recorded in digital times. They compare sets of events, saying which last the longest.	
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	Roll It Out: In pairs, children take turns to roll a dice. They explain to their partner what they have learned in the lesson by following the instructions for the number they have rolled.				

Masterit

Planit: Children create a timetable for their perfect day out, stating the start and end times and the duration of each event.

Investigateit: Children use the internet to find the times of train journeys from their nearest station to other cities. They calculate how long the journeys last and compare journeys.

Measurement | A Day Out

I can calculate the duration of events.		
I can calculate the amount of time that passes between one time and another.		
I can add durations to find the total time taken by combinations of events.		

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