






















Statistics: Train Timetables

Aim: Complete, read and interpret information in tables, including timetables. I can complete, read and interpret information presented in a train timetable.	Success Criteria: I can read and interpret a train timetable written using 24-hour time. I can calculate how much time has passed in hours and minutes. I can answer questions about the information shown in a train timetable and explain my reasoning.	Resources: Lesson Pack
	Key/New Words: Timetable, table, data.	Preparation: Differentiated Train Timetable Activity Sheets – one per child

Prior Learning: It will be helpful if children have experience of interpreting data in tables and can read, write and convert time on both analogue and digital clocks.

Learning Sequence

	Journey Time: Children find the time difference between two stops on the train timetable shown on the Lesson Presentation , calculating how much time has passed in hours and minutes. They convert between minutes and hours and minutes, showing their answers on whiteboards.				
	Travelling by Train: Use the timetable shown on the Lesson Presentation to discuss the features of a train timetable. Point out the information that is shown by each heading, row and column, and why some spaces in the timetable do not show a time.				
	Train Timetable Questions: Use the timetable shown on the Lesson Presentation to practise reading and interpreting train timetables accurately. Children answer the questions about the information shown in the train timetable and explain their reasoning.				
	Train Timetables: Children complete the differentiated Train Timetables Activity Sheets to show they can complete, read and interpret information presented in a timetable. <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td style="text-align: center; width: 33%;">  Read and interpret a train timetable to answer questions that involve calculating simple durations of train journeys with times given in multiples of five. Complete simple missing times in a timetable. </td> <td style="text-align: center; width: 33%;">  Read and interpret a train timetable to answer questions that involve calculating durations of train journeys with times given in multiples of five. Explain their reasoning for some questions. Complete missing times in a timetable. </td> <td style="text-align: center; width: 33%;">  Read and interpret a train timetable to answer questions that involve calculating durations of train journeys. Explain their reasoning for some questions. Complete more difficult missing times in a timetable. </td> </tr> </table>	 Read and interpret a train timetable to answer questions that involve calculating simple durations of train journeys with times given in multiples of five. Complete simple missing times in a timetable.	 Read and interpret a train timetable to answer questions that involve calculating durations of train journeys with times given in multiples of five. Explain their reasoning for some questions. Complete missing times in a timetable.	 Read and interpret a train timetable to answer questions that involve calculating durations of train journeys. Explain their reasoning for some questions. Complete more difficult missing times in a timetable.	
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	Question Time: The children use the return journey train timetable shown on the _____ to write their own questions for a friend to answer.				
	Train Fares: Practise interpreting and reading information presented in a table accurately about the cost of travelling by train from London to Euston, using the table shown on the _____				

Exploreit

Doit: Plan a trip by train to visit a relative or friend, using tables and timetables to find train times and ticket prices.

Exploreit: Use real-life examples of local train timetables to write and answer questions about time.



Maths

Statistics



Aim

- I can complete, read and interpret information presented in a train timetable.

Success Criteria

- I can read and interpret a train timetable written using 24-hour time.
- I can calculate how much time has passed in hours and minutes.
- I can answer questions about the information shown in a train timetable and explain my reasoning.

Journey Time



How long is the train journey from Stevenage to Doncaster in hours and minutes?

London King's Cross » Newcastle

London King's Cross	13:00
Stevenage	13:37
Peterborough	14:06
Doncaster	14:57
York	15:18
Newcastle	16:16

1 hour and 20 minutes.
What is this time in minutes?

80 minutes.

Journey Time



How long is the train journey from London King's Cross to Newcastle in hours and minutes?

London King's Cross » Newcastle	
London King's Cross	13:00
Stevenage	13:37
Peterborough	14:06
Doncaster	14:57
York	15:18
Newcastle	16:16

3 hours and 16 minutes.
What is this time in minutes?

196 minutes.

Journey Time



How long is the train journey from Peterborough to York in minutes?

London King's Cross » Newcastle	
London King's Cross	13:00
Stevenage	13:37
Peterborough	14:06
Doncaster	14:57
York	15:18
Newcastle	16:16

72 minutes. What is this time in hours and minutes?

1 hour and 12 minutes.

Journey Time



How long is the train journey from Peterborough to Newcastle in minutes?

London King's Cross » Newcastle	
London King's Cross	13:00
Stevenage	13:37
Peterborough	14:06
Doncaster	14:57
York	15:18
Newcastle	16:16

130 minutes. What is this time in hours and minutes?

2 hours and 10 minutes.

Travelling by Train



Kamilo and his friends are going to visit their grandparents in Preston. This timetable shows the times that the train passes through Preston. The train starts at 15:31 and ends at 19:51. It stops at London Euston, Rugby, Birmingham New Street, Wolverhampton, Crewe, Wigan North Western and Preston. The train is 24 hours long.

London Euston » Preston

	A	B	C	D	E	F
London Euston	-	-	15:31	-	17:30	16:43
Rugby	-	-	16:45	-	-	17:20
Birmingham New Street	-	16:15	-	17:15	-	18:15
Wolverhampton	-	16:37	-	17:37	-	18:37
Crewe	15:57	17:09	17:32	18:09	-	19:09
Wigan North Western	16:25	17:38	18:00	18:38	19:25	19:38
Preston	16:38	17:51	18:13	18:51	19:38	19:51

Train Timetable Questions



We can use the timetable to answer questions about Kamil's train journey.
 Train D will arrive at Preston at 19:51. Is this the best time to go to Preston?

No. The train will arrive at 19:12 which is twelve minutes too late.

London	A	B	C	D	E	F
London Euston	-	-	15:31	-	17:30	16:43
Rugby	-	-	16:45	-	-	17:20
Birmingham New Street	-	16:15	-	17:15	-	18:15
Wolverhampton	-	16:37	-	17:37	-	18:37
Crewe	15:57	17:09	17:32	18:09	-	19:09
Wigan North Western	16:25	17:38	18:00	18:38	19:25	19:38
Preston	16:38	17:51	18:13	18:51	19:38	19:51

Train Timetables



Use your terrific timetable skills to complete these activities.

★★★★ Read a timetable of a morning train from London to London Filton (LF) and complete the table.

London Luton & Princes

London Luton

Biggles

London Luton & Princes

★★★★ **Train**

London Luton & Princes

London Luton

Biggles

London Luton & Princes

London Luton & Princes	A
London Filton	13:05
Biggles	14:05
London Luton & Princes	15:05
London Luton	16:05
London Luton & Princes	17:05
London Luton	18:05
London Luton & Princes	19:05

- How long does it take to travel?
- How long does it take to travel?
- How long does it take to travel?
- How many minutes does it take to travel from London Luton & Princes to London Filton?
- London Luton & Princes leaves at 13:05. How long does it take to travel to London Filton?
- London Luton & Princes leaves at 17:05. How long does it take to travel to London Filton?

★★★★ Read a timetable of a morning train from London to London Filton (LF) and complete the table.

London Luton & Princes

London Luton

Biggles

London Luton & Princes

★★★★ **Train**

London Luton & Princes

London Luton

Biggles

London Luton & Princes

London Luton & Princes	A
London Filton	13:05
Biggles	14:05
London Luton & Princes	15:05
London Luton	16:05
London Luton & Princes	17:05
London Luton	18:05
London Luton & Princes	19:05

- How long does it take to travel?
- How long does it take to travel?
- How long does it take to travel?
- If you travel to London Luton & Princes at 14:05, how long does it take to travel to London Filton?
- How many minutes does it take to travel from London Luton & Princes to London Filton?
- London Luton & Princes leaves at 17:05. How long does it take to travel to London Filton?

★★★★ **Train Timetables**

London Luton & Princes

London Luton & Princes	A	B	C	D	E	F
London Filton	13:05	14:05	15:05	16:05	17:05	18:05
Biggles	14:05	15:05	16:05	17:05	18:05	19:05
London Luton & Princes	15:05	16:05	17:05	18:05	19:05	20:05
London Luton	16:05	17:05	18:05	19:05	20:05	21:05
London Luton & Princes	17:05	18:05	19:05	20:05	21:05	22:05
London Luton	18:05	19:05	20:05	21:05	22:05	23:05
London Luton & Princes	19:05	20:05	21:05	22:05	23:05	24:05

- How long does it take to travel from London Luton & Princes to London Filton?
- How long does it take to travel from London Luton & Princes to London Filton?
- How long does it take to travel from London Luton & Princes to London Filton?
- If you travel to London Luton & Princes at 14:05, how long does it take to travel to London Filton?
- London Luton & Princes leaves at 17:05. How long does it take to travel to London Filton?
- London Luton & Princes leaves at 19:05. How long does it take to travel to London Filton?

How long does it take to travel from London Luton & Princes to London Filton?

London Luton & Princes	A	B	C
London Filton	13:05		
Biggles		14:05	
London Luton & Princes			15:05

Question Time



Using this train timetable, write your own question for a friend to answer.

London Euston » Preston						
	A	B	C	D	E	F
London Euston	-	-	15:31	-	17:30	16:43
Rugby	-	-	16:45	-	-	17:20
Birmingham New Street	-	16:15	-	17:15	-	18:15
Wolverhampton	-	16:37	-	17:37	-	18:37
Crewe	15:57	17:09	17:32	18:09	-	19:09
Wigan North Western	16:25	17:38	18:00	18:38	19:25	19:38
Preston	16:38	17:51	18:13	18:51	19:38	19:51

Train Fares



Here are the ticket prices for travelling by train from London Euston to Preston:

Ticket	Price (First Class)	Price (Standard Class)
Adult	£125	£84
Adult (18-25)	£84	£68
Child	£50	£39

Kamil's mum.

Aim



- I can complete, read and interpret information presented in a train timetable.

Success Criteria

- I can read and interpret a train timetable written using 24-hour time.
- I can calculate how much time has passed in hours and minutes.
- I can answer questions about the information shown in a train timetable and explain my reasoning.



Aim: I can complete, read and interpret information presented in a train timetable.				Date:					
				Delivered By:			Support:		
Success Criteria	Me	Friend	Teacher	T	PPA	S	I	AL	GP
I can read and interpret a train timetable written using 24-hour time.				Notes/Evidence					
I can calculate how much time has passed in hours and minutes.									
I can answer questions about the information shown in a train timetable and explain my reasoning.									
Next Steps									
) _____									
) _____									

T	Teacher	I	Independent
PPA	Planning, Preparation and Assessment	AL	Adult Led
S	Supply	GP	Guided Practice

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I can calculate how much time has passed in hours and minutes.									
I can answer questions about the information shown in a train timetable and explain my reasoning.									
Next Steps									
) _____									
) _____									

T	Teacher	I	Independent
PPA	Planning, Preparation and Assessment	AL	Adult Led
S	Supply	GP	Guided Practice



Train Timetables

I can complete, read and interpret information presented in a train timetable.



London Euston » Preston						
	A	B	C	D	E	F
London Euston	13:00	14:05	15:30	15:45	17:30	16:45
Rugby	14:15	15:20	16:05	16:20	-	17:20
Birmingham New Street	15:10	16:15	17:00	17:15	-	18:15
Wolverhampton	15:30	16:35	17:20	17:35	-	18:35
Crewe	16:00	17:10	-	18:10	-	19:10
Wigan North Western	16:25	17:40	-	18:40	19:25	19:40
Preston	16:40	17:50	18:20	18:50	19:40	19:50

- How long does it take to travel from London Euston to Preston on Train C?

- How long does it take to travel from Birmingham New Street to Crewe on Train B?

- How long does it take to travel from Wolverhampton to Wigan North Western on Train D?

- How much quicker is Train E than Train F in travelling from London Euston to Preston?

- To be in Crewe before 18:30, what is the latest train you could catch from Birmingham New Street?

- If you arrived at Rugby at 15:40 to catch a train to Crewe, how long would you have to wait for a train?

Here is part of the morning train timetable. The trains run 5 hours earlier than the afternoon timetable. Fill in the missing times:

London Euston » Preston			
	A	B	C
London Euston	08:00		
Rugby		10:20	
Birmingham New Street			12:00



Train Timetables Answers

Question	Answer																				
1.	How long does it take to travel from London Euston to Preston on Train C?																				
	2 hours 50 minutes																				
2.	How long does it take to travel from Birmingham New Street to Crewe on Train B?																				
	55 minutes																				
3.	How long does it take to travel from Wolverhampton to Wigan North Western on Train D?																				
	1 hour 5 minutes																				
4.	How much quicker is Train E than Train F in travelling from London Euston to Preston?																				
	55 minutes																				
5.	To be in Crewe before 18:30, what is the latest train you could catch from Birmingham New Street?																				
	Train D																				
6.	If you arrived at Rugby at 15:40 to catch a train to Crewe, how long would you have to wait for a train?																				
	40 minutes																				
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London Euston » Preston																					
	A	B	C																		
London Euston	08:00	09:05	10:30																		
Rugby	09:15	10:20	11:05																		
Birmingham New Street	10:10	11:15	12:00																		



Train Timetables

I can complete, read and interpret information presented in a train timetable.



London Euston » Preston						
	A	B	C	D	E	F
London Euston	13:05	14:05	15:35	15:45	17:35	16:55
Rugby	14:15	15:20	-	16:20	-	17:20
Birmingham New Street	15:10	16:15	17:05	17:15	-	18:15
Wolverhampton	15:35	16:35	17:20	17:35	-	18:35
Crewe	16:05	17:10	18:00	-	-	19:05
Wigan North Western	16:25	17:40	-	18:40	19:25	19:35
Preston	16:40	17:50	18:25	18:50	19:40	19:45

- 1) How long does it take to travel from London Euston to Preston on Train C?

- 2) How long does it take to travel from Birmingham New Street to Crewe on Train B?

- 3) How long does it take to travel from Wolverhampton to Preston on Train D?

- 4) If you arrived at Birmingham New Street at 17:10, how long would you have to wait to catch the next train to Crewe?

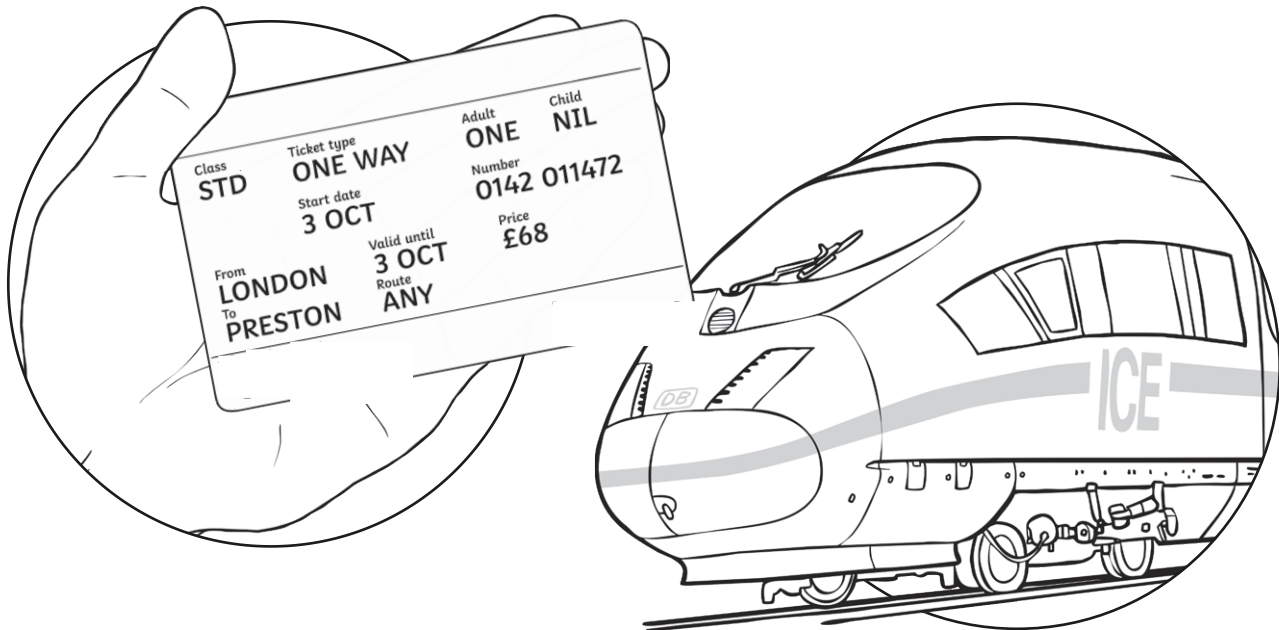
- 5) How much quicker is Train E than Train F in travelling from London Euston to Preston? Explain your reasoning.

- 6) To be in Crewe before 18:30, what is the latest train you could catch from Rugby? Explain your reasoning.



Here is part of the morning train timetable. The trains run 5 hours and 10 minutes earlier than the afternoon timetable. Fill in the missing times:

London Euston » Preston			
	A	B	C
London Euston	07:55		
Rugby		10:10	-
Birmingham New Street			11:55





Train Timetables Answers

Question	Answer																				
1.	How long does it take to travel from London Euston to Preston on Train C?																				
	2 hours 50 minutes																				
2.	How long does it take to travel from Birmingham New Street to Crewe on Train B?																				
	55 minutes																				
3.	How long does it take to travel from Wolverhampton to Preston on Train D?																				
	1 hour 15 minutes																				
4.	If you arrived at Birmingham New Street at 17:10, how long would you have to wait to catch the next train to Crewe?																				
	1 hour and 5 minutes																				
5.	How much quicker is Train E than Train F in travelling from London Euston to Preston? Explain your reasoning.																				
	Train E takes 2 hours and 5 minutes and Train F takes 2 hours and 50 minutes. The difference between these times is 45 minutes so Train E is 45 minutes quicker.																				
6.	To be in Crewe before 18:30, what is the latest train you could catch from Rugby? Explain your reasoning.																				
	Train B. Trains C, D and E do not stop at both Rugby and Crewe, and Train F arrives too late.																				
	Here is part of the morning train timetable. The trains run 5 hours earlier than the afternoon timetable. Fill in the missing times:																				
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Birmingham New Street	10:00	11:05	11:55																		



Train Timetables

I can complete, read and interpret information presented in a train timetable.



London Euston » Preston						
	A	B	C	D	E	F
London Euston	13:06	14:08	15:33	15:46	17:37	16:51
Rugby	14:14	15:19	16:06	-	-	17:23
Birmingham New Street	15:12	16:17	17:03	17:18	-	18:19
Wolverhampton	15:34	16:29	17:23	17:36	-	18:34
Crewe	16:09	17:11	-	18:13	-	19:08
Wigan North Western	16:28	17:41	-	18:44	19:27	19:36
Preston	16:43	17:54	18:26	18:52	19:41	19:43

- 1) How long does it take to travel from London Euston to Preston on train C?

- 2) How long does it take to travel from Birmingham New Street to Crewe on train B?

- 3) How long does it take to travel from Wolverhampton to Preston on train D?

4. How much quicker is train E than train F in travelling from London Euston to Preston?

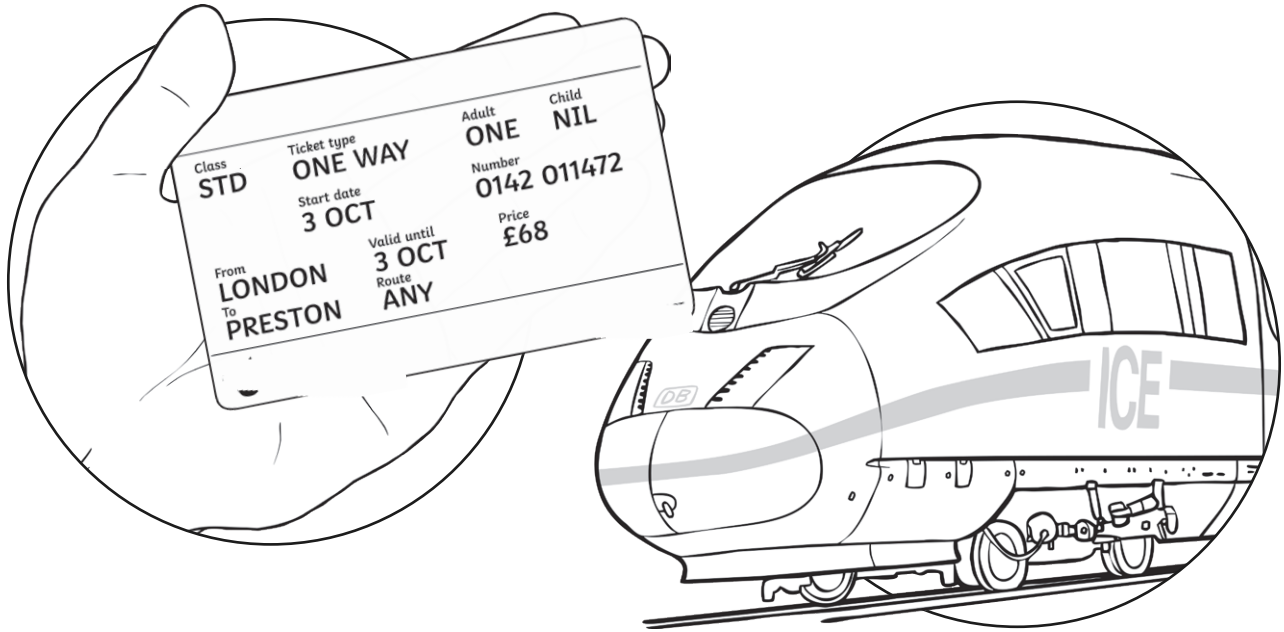
- 5) To be in Crewe before 18:30, what is the latest train you could catch from Rugby? Explain your reasoning.

- 6) If you arrived at London Euston at 15:20, how long would you have to wait to catch the next train to Crewe? Explain your reasoning.



Here is part of the morning train timetable. The trains run 4 hours and 25 minutes earlier than the afternoon timetable. Fill in the missing times:

London Euston » Preston			
	A	B	C
London Euston	08:41		
Rugby		10:54	
Birmingham New Street			12:38





Train Timetables Answers

Question	Answer																				
1.	How long does it take to travel from London Euston to Preston on train C?																				
	2 hours 53 minutes																				
2.	How long does it take to travel from Birmingham New Street to Crewe on train B?																				
	54 minutes																				
3.	How long does it take to travel from Wolverhampton to Preston on train D?																				
	1 hour 16 minutes																				
4.	How much quicker is train E than train F in travelling from London Euston to Preston?																				
	48 minutes																				
5.	To be in Crewe before 18:30, what is the latest train you could catch from Rugby? Explain your reasoning.																				
	Train B. Trains C, D and E do not stop at both Rugby and Crewe, and Train F arrives too late.																				
6.	If you arrived at London Euston at 15:20, how long would you have to wait to catch the next train to Crewe? Explain your reasoning.																				
	As Train C doesn't stop at Crewe, you would have to wait 26 minutes to catch Train D.																				
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Birmingham New Street	10:47	11:52	12:38																		

Statistics | Train Timetables

I can complete, read and interpret information presented in a train timetable.		
I can read and interpret a train timetable written using 24-hour time.		
I can calculate how much time has passed in hours and minutes.		
I can answer questions about the information shown in a train timetable and explain my reasoning.		

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Statistics | Train Timetables

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I can read and interpret a train timetable written using 24-hour time.		
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I can read and interpret a train timetable written using 24-hour time.		
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