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 Se	quence							
	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.							
Vincie Class	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.							
	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. 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.							
	Question Time: The children use the return journey train timetable shown on the own questions for a friend to answer. to write their							
TUTTole Class	Train Fares: Practise interpreting and reading information presented in a table accurately b ons about the cost of travelling by train from London to Euston, using the table shown on the							
	Plan a trip by train to visit a relative or friend, using tables and timetables to find train times and ticket prices. Use real-life examples of local train timetables to write and answer questions about time.							

Maths

Statistics

Maths | Year 5 | Statistics | Timetables | Lesson 4 of 5: Train Timetables



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.

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

	London King's Cross »	Newcastle	
The same	London King's Cross	13:00	
SS 3	Stevenage	13:37	
Startes .	Peterborough	14:06	E In
	Doncaster	14:57	
	York	15:18	
	Newcastle	16:16	12
WI	1 hour and 20 minutes at is this time in minu	tes?	nutes.

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

Stevenage13:37Peterborough14:06Doncaster14:57York15:18	London King's Cross	13:00	
Doncaster 14:57 York 15:18	Stevenage	13:37	
York 15:18	Peterborough	14:06	K.
A to a second	Doncaster	14:57	
	York	15:18	
Newcastle 16:16	Newcastle	16:16	

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

London King's Cross		
London King's Cross	13:00	
Stevenage	13:37	5. MIL
Peterborough	14:06	E.
Doncaster	14:57	
York	15:18	J.
Newcastle	16:16	
72 minutes. What is th time in hours and minut		ind tes.

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	V
> Peterborough	14:06	
Doncaster	14:57	1
York	15:18	V
newcastle	16:16	
130 minutes. What is thi time in hours and minute	s 2 hours and s? 10 minutes	

Travelling by Train

	А	В	С	D	Е	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

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Train Timetable Questions

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twelve minutes		В	С	D	E	F
London Euston	-	-	15:31	-	17:30	16:4
Rugby	1 .	-	16:45	N 9	-	17:20
Birmingham New Street		16:15		17:15	Al	18:1
Wolverhampton	Ŧ	16:37	-	17:37	1	18:3
Crewe	15:57	17:09	17:32	18:09		19:0
Wigan North Western	16:25	17:38	18:00	18:38	19:25	19:3
Preston	16:38	17:51	18:13	18:51	19:38	19:5

Train Timetables

Use your terrific timetable skills to complete these activities.

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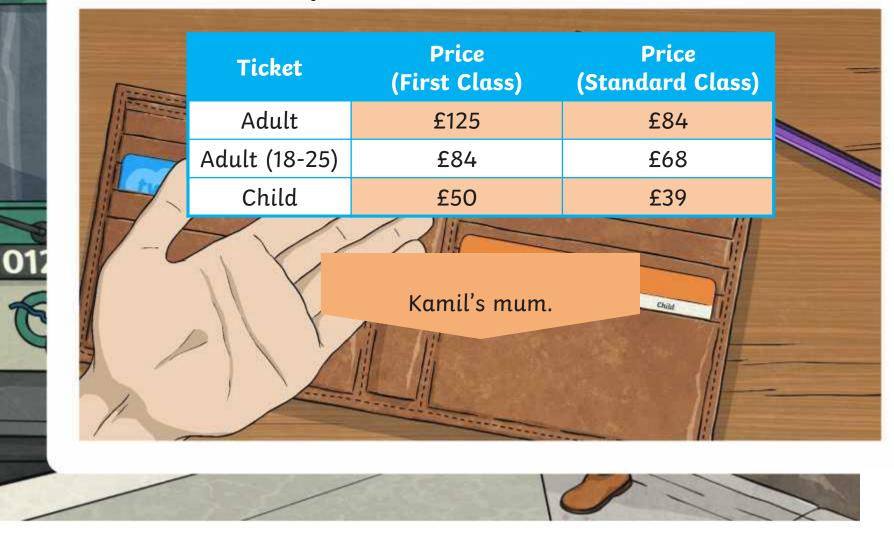
Question Time

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

	А	В	С	D	E	F
London Euston		-	15:31	-	17:30	16:43
Rugby	5 .0		16:45	N e s	-	17:20
Birmingham New Street	-	16:15	M.	17:15	1711	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:



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.



	rain timetab	le.	Date	:				
			Deliv	vered By:		Supp	ort:	
Me	Friend	Teacher	т	РРА	s	I	AL	GP
			Notes/Evidence					
	Me	Me Friend	Me Friend Teacher Image: Second s	Me Friend Teacher T	Me Friend Teacher T PPA		Me Friend Teacher T PPA S I	Me Friend Teacher T PPA S I AL

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

Aim: I can complete, read and interpret information presented in a train timetable.			Date:						
				Delive	Delivered By:			Support:	
Success Criteria	Me	Friend	Teacher	т	РРА	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	1	4		_1					
J									
J									

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

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

London Euston » Preston								
	A	В	С	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?
- 4) How much quicker is Train 5) E than Train F in travelling from London Euston to
- 2) How long does it take to travel from Birmingham New Street to Crewe on Train B?
 - 5) To be in Crewe before 18:30, what is the latest train you could catch from Birmingham New Street?
- 3) How long does it take to travelfromWolverhampton to Wigan North Western on 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?

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

Preston?

London Euston » Preston							
	Α	В	С				
London Euston	08:00						
Rugby		10:20					
Birmingham New Street			12:00				

Train Timetables **Answers**

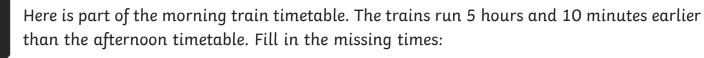
Question	Answer					
1.	How long do	How long does it take to travel from London Euston to Preston on Train C?				
	2 hours 50 I	minutes				
2.	How long do	es it take to travel from Birmingham N	lew Street to C	rewe on Train	B?	
	55 minutes					
3.	How long do	es it take to travel from Wolverhampto	on to Wigan No	orth Western o	n Train D?	
	I hour 5 min	nutes				
4.	How much q	uicker is Train E than Train F in travel	ling from Lond	on Euston to F	Preston?	
	55 minutes					
5.	To be in Crev	ve before 18:30, what is the latest trai	n you could ca	tch from Birm	ingham New S	Street?
	Train D					
6.	If you arrived	d at Rugby at 15:40 to catch a train to	o Crewe, how l	ong would you	u have to wait	for a train?
	40 minutes					
	Here is part of in the missin	of the morning train timetable. The trai g times:	ins run 5 hours	s earlier than t	the afternoon t	timetable. Fill
		London Euston » Preston				
			Α	В	С	
		London Euston	08:00	09:05	10:30	
		Rugby	09:15	10:20	11:05	
		Birmingham New Street	10:10	11:15	12:00	

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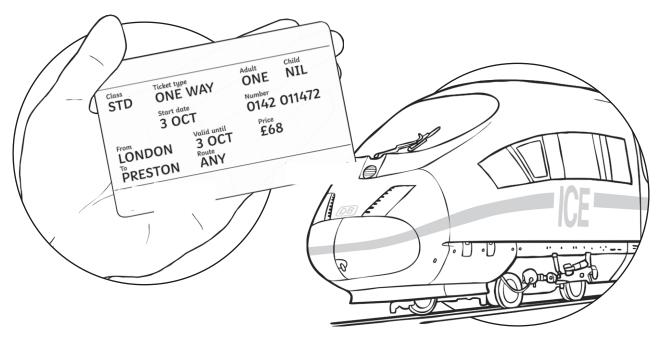
I can complete, read and interpret information presented in a train timetable.

London Euston » Preston									
	А	В	С	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.



London Euston » Preston							
	Α	В	С				
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 C	Crewe on Train	B?		
	55 minutes					
3.	How long does it take to travel from Wolverhamp	ton to Preston o	n Train D?			
	I hour 15 minutes					
4.	If you arrived at Birmingham New Street at 17:1 to Crewe?), how long wou	ld you have to	wait to catch	the next train	
	I hour and 5 minutes					
5.	How much quicker is Train E than Train F in travel	ing from London	Euston to Pres	ton? Explain yo	our 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 tr	ain you could co	atch from Ruge	oy? Explain yo	ur reasoning.	
	Train B. Trains C, D and E do not stop at bot	h Rugby and C	rewe, and Tra	ain F arrives t	too late.	
	Here is part of the morning train timetable. The t in the missing times:	rains run 5 hour	s earlier than t	the afternoon 1	imetable. Fill	
	London Euston » Preston					
		А	В	С		
	London Euston	07:55	08:55	10:25		
	Rugby	09:05	10:10	-		
	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									
	Α	В	С	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			

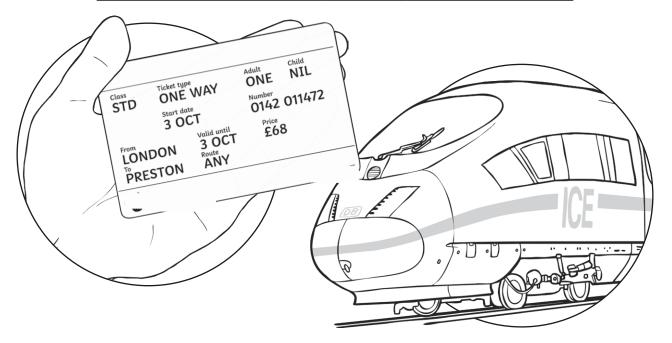
1) How long does it take to travel from London Euston to Preston on train C?

- 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							
	Α	В	С				
London Euston	08:41						
Rugby		10:54					
Birmingham New Street			12:38				





Train Timetables **Answers**

Question	Answer					
1.	How long do	es it take to travel from London Eustor	n to Preston on	train C?		
	2 hours 53	minutes				
2.	How long do	es it take to travel from Birmingham N	lew Street to C	rewe on train	B?	
	54 minutes					
3.	How long do	es it take to travel from Wolverhampto	on to Preston o	n train D?		
	I hour 16 mi	inutes				
4.	How much q	uicker is train E than train F in travell	ing from Lond	on Euston to P	reston?	
	48 minutes	:				
5.	To be in Crew	ve before 18:30, what is the latest train	you could cat	ch from Rugby	? Explain your	reasoning.
	Train B. Tra	ins C, D and E do not stop at both	Rugby and C	rewe, and Tra	ain F arrives t	too late.
6.		ed at London Euston at 15:20, how la ain your reasoning.	ong would you	ı have to wait	to catch the	next train to
	As Train C doesn't stop at Crewe, you would have to wait 26 minutes to catch Train D.					
		of the morning train timetable. The netable. Fill in the missing times:	trains run 4	hours and 2	5 minutes ear	lier than the
		London Euston » Preston				
			A	В	С	
		London Euston	08:41	09:43	11:08	
		Rugby	09:49	10:54	11:41	
		Birmingham New Street	10:47	11:52	12:38	

Statistics | Train Timetables

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