## Tuesday $14^{\text {th }}$ July

## Year 5: Timetables

## Introduction

Read the information in the timetable.

| Origin | Destination | Depart | Arrive | Changes |
| :---: | :---: | :---: | :---: | :---: |
| Leeds | Manchester | $14: 25$ | $15: 40$ | 2 |
| Halifax | York | $14: 40$ | $15: 35$ | 3 |
| Manchester | Halifax | $15: 05$ | $15: 55$ | 0 |
| York | Leeds | $15: 35$ | $16: 05$ | 1 |

What is this timetable showing?
Which line has the most changes?

What is the earliest departure on the timetable?
What is the earliest arrival on the timetable?

## Introduction

Read the information in the timetable.

| Origin | Destination | Depart | Arrive | Changes |
| :---: | :---: | :---: | :---: | :---: |
| Leeds | Manchester | $14: 25$ | $15: 40$ | 2 |
| Halifax | York | $14: 40$ | $15: 35$ | 3 |
| Manchester | Halifax | $15: 05$ | $15: 55$ | 0 |
| York | Leeds | $15: 35$ | $16: 05$ | 1 |

What is this timetable showing?
Different train departure and arrival times.
Which line has the most changes?
The train from Halifax to York has 3 changes.
What is the earliest departure on the timetable?
The earliest departure is Leeds to Manchester at 14:25.
What is the earliest arrival on the timetable?
The Halifax to York arrives at 15:35.

## Varied Fluency 1

Look at the train timetable below.

|  | Train A | Train B | Train C | Train D |
| :---: | :---: | :---: | :---: | :---: |
| Chester | $08: 35$ | $09: 05$ | $09: 35$ | $10: 15$ |
| Whitby Woods | $08: 47$ | $09: 17$ | $09: 48$ | $10: 27$ |
| Ellesmere Port | $08: 50$ | $09: 20$ | $09: 52$ | $10: 30$ |
| Hooton | $09: 02$ | $09: 32$ | $10: 05$ | $10: 42$ |
| Bromborough | $09: 08$ | $09: 38$ | $10: 13$ | $10: 48$ |
| Liverpool | $09: 35$ | $10: 15$ | $10: 40$ | $11: 10$ |

Which train takes the shortest amount of time to get from Chester to Liverpool?
How many more seconds does it take to get from Whitby Woods to Ellesmere Port on the 09.35 train compared with the other trains?

## Varied Fluency 1

Look at the train timetable below.

|  | Train A | Train B | Train C | Train D |
| :---: | :---: | :---: | :---: | :---: |
| Chester | $08: 35$ | $09: 05$ | $09: 35$ | $10: 15$ |
| Whitby Woods | $08: 47$ | $09: 17$ | $09: 48$ | $10: 27$ |
| Ellesmere Port | $08: 50$ | $09: 20$ | $09: 52$ | $10: 30$ |
| Hooton | $09: 02$ | $09: 32$ | $10: 05$ | $10: 42$ |
| Bromborough | $09: 08$ | $09: 38$ | $10: 13$ | $10: 48$ |
| Liverpool | $09: 35$ | $10: 15$ | $10: 40$ | $11: 10$ |

Which train takes the shortest amount of time to get from Chester to Liverpool? Train D
How many more seconds does it take to get from Whitby Woods to Ellesmere Port on Train C compared to the other trains? 60 seconds

## Varied Fluency 2

Each train takes the same amount of time to travel between each station.

| London Euston | $14: 37$ | $14: 57$ | $15: 17$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Watford |  | $15: 10$ |  | $15: 50$ |
| Milton Keynes | $15: 15$ |  | $15: 55$ | $16: 15$ |
| Coventry | $15: 45$ | $16: 05$ |  | $16: 45$ |
| Birmingham |  | $16: 22$ | $16: 42$ |  |

Calculate the missing times.

## Varied Fluency 2

Each train takes the same amount of time to travel between each station.

| London Euston | $14: 37$ | $\mathbf{1 4 : 5 7}$ | $\mathbf{1 5 : 1 7}$ | $15: 37$ |
| :---: | :---: | :---: | :---: | :---: |
| Watford | $14: 50$ | $15: 10$ | $15: 30$ | $15: 50$ |
| Milton Keynes | $15: 15$ | $15: 35$ | $15: 55$ | $16: 15$ |
| Coventry | $15: 45$ | $16: 05$ | $16: 25$ | $16: 45$ |
| Birmingham | $16: 02$ | $16: 22$ | $16: 42$ | $17: 02$ |

Calculate the missing times.

## Varied Fluency 3

Zumba lasts for 18 minutes less than Yoga.
What time does Zumba finish?

| Aerobics | Yoga | Pilates | Zumba | Karate |
| :---: | :---: | :---: | :---: | :---: |
| $17: 25$ | $18: 00$ | $18: 55$ | $20: 45$ | $21: 15$ |
| - | - | - | - | - |
| $18: 05$ | $19: 00$ | $19: 30$ | $?$ | $21: 45$ |

## Varied Fluency 3

Zumba lasts for 18 minutes less than Yoga.
What time does Zumba finish?

| Aerobics | Yoga | Pilates | Zumba | Karate |
| :---: | :---: | :---: | :---: | :---: |
| $17: 25$ | $18: 00$ | $18: 55$ | $20: 45$ | $21: 15$ |
| - | - | - | - | - |
| $18: 05$ | $19: 00$ | $19: 30$ | $21: 27$ | $21: 45$ |

## Problem Solving 1

A cinema is showing three films.
Use the information below to create a timetable to show what time each film starts and ends.

Journey to Jupiter starts 25 minutes after Finding Nory and ends 10 minutes before it. Finding Nory lasts for
1 hour 45 minutes and finishes at 9:05pm. Maze Jogger starts 15 minutes before Finding Nory and finishes

5 minutes after Journey to Jupiter.

## Problem Solving 1

A cinema is showing three films.
Use the information below to create a timetable to show what time each film starts and ends.

Journey to Jupiter starts 25 minutes after Finding Nory and ends 10 minutes before it. Finding Nory lasts for
1 hour 45 minutes and finishes at 9:05pm. Maze Jogger starts 15 minutes before Finding Nory and finishes 5 minutes after Journey to Jupiter.

Timetables should include: Finding Nory 7:20pm - 9:05pm Journey to Jupiter 7:45pm - 8:55pm
Maze Jogger 7:05pm - 9:00pm

Caleb thinks he spends most time studying English each week.

|  | $\begin{gathered} 9: 05 \\ - \\ 10: 05 \end{gathered}$ | $\begin{gathered} 10: 05 \\ - \\ 11: 05 \end{gathered}$ | $\begin{gathered} 11: 05 \\ - \\ 12: 05 \end{gathered}$ | $\begin{gathered} 12: 05 \\ - \\ 13: 05 \end{gathered}$ | $\begin{gathered} 13: 05 \\ - \\ 14: 05 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mon | English | 倠 | Lunch | Maths |  |
| Tues | History | Maths |  | § | usic |
| Wed | Maths |  | $\frac{0}{3}$ | Lunch | English |
| Thurs | History | Music | English | Lunch | Art |
| Fri | English | Art | Lunch | Hockey |  |

Do you agree with him? Explain why.

Caleb thinks he spends most time studying English each week.

|  | $\begin{gathered} 9: 05 \\ - \\ 10: 05 \end{gathered}$ | $\begin{gathered} 10: 05 \\ - \\ 11: 05 \end{gathered}$ | $\begin{gathered} 11: 05 \\ - \\ 12: 05 \end{gathered}$ | $\begin{gathered} 12: 05 \\ - \\ 13: 05 \end{gathered}$ | $\begin{gathered} 13: 05 \\ - \\ 14: 05 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mon | English | 倠 | Lunch | Maths |  |
| Tues | History | Maths |  | § | usic |
| Wed | Maths |  | $\frac{0}{3}$ | Lunch | English |
| Thurs | History | Music | English | Lunch | Art |
| Fri | English | Art | Lunch | Hockey |  |

Do you agree with him? Explain why.
No because...

Caleb thinks he spends most time studying English each week.

|  | $\begin{gathered} 9: 05 \\ - \\ 10: 05 \end{gathered}$ | $\begin{gathered} 10: 05 \\ - \\ 11: 05 \end{gathered}$ | $\begin{gathered} 11: 05 \\ - \\ 12: 05 \end{gathered}$ | $\begin{gathered} 12: 05 \\ - \\ 13: 05 \end{gathered}$ | $\begin{gathered} 13: 05 \\ - \\ 14: 05 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mon | English | 倠 | Lunch | Maths |  |
| Tues | History | Maths |  | § | usic |
| Wed | Maths |  | $\frac{0}{3}$ | Lunch | English |
| Thurs | History | Music | English | Lunch | Art |
| Fri | English | Art | Lunch | Hockey |  |

Do you agree with him? Explain why.
No because he studies English for 5 hours but he studies Maths for 6 hours.

## Reasoning 2

Sally has created a timetable of her after school activities.
She thinks she spends more than 2,000 seconds a day watching TV.

| Violin | Homework | Dance | TV | Reading |
| :---: | :---: | :---: | :---: | :---: |
| $15: 25$ <br> - <br> $16: 05$ | $16: 45$ <br> - <br> $17: 20$ | $18: 20$ <br> - <br> $19: 15$ | $19: 50$ <br> - <br> $20: 30$ | $20: 40$ <br> - <br> $21: 10$ |

Do you agree? Explain why.

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| :---: | :---: | :---: | :---: | :---: |
| $15: 25$ <br> - <br> $16: 05$ | $16: 45$ <br> - <br> $17: 20$ | $18: 20$ <br> - <br> $19: 15$ | $19: 50$ <br> - <br> $20: 30$ | $20: 40$ <br> - <br> $21: 10$ |

Do you agree? Explain why.
Yes because...

## Reasoning 2

Sally has created a timetable of her after school activities.
She thinks she spends more than 2,000 seconds a day watching TV.

| Violin | Homework | Dance | TV | Reading |
| :---: | :---: | :---: | :---: | :---: |
| $15: 25$ <br> - <br> $16: 05$ | $16: 45$ <br> - <br> $17: 20$ | $18: 20$ <br> - <br> $19: 15$ | $19: 50$ <br> - <br> $20: 30$ | $20: 40$ <br> - <br> $21: 10$ |

Do you agree? Explain why.
Yes because she watches TV for 40 minutes which is 2,400 seconds.

## Year 5 Developing

1a. Look at the bus timetable below.

|  | Bus A | Bus B | Bus C | Bus D |
| :---: | :---: | :---: | :---: | :---: |
| Prestwich | १:15 | $10: 15$ | $11: 15$ | $12: 15$ |
| Carr Clough | $\mathrm{q}: 25$ | $10: 25$ | $11: 25$ | $12: 25$ |
| Kersal | $\mathrm{q}: 30$ | $10: 30$ | $11: 30$ | $12: 30$ |
| Cromwell St. | $\mathrm{q}: 35$ | $10: 35$ | $11: 35$ | $12: 35$ |
| Manchester | १:55 | $10: 55$ | $11: 45$ | $12: 50$ |

How long does it take Bus C to get from Cromwell Street to Manchester?

Which two buses take exactly the same amount of time to travel from
Prestwich to Manchester?


5 VF
$2 a$. Here is a timetable for lake cruises.

|  | Boat A | Boat B | Boat C | Boat D |
| :---: | :---: | :---: | :---: | :---: |
| Glenridding | $2: 00 \mathrm{pm}$ | $3: 00 \mathrm{pm}$ | $4: 00 \mathrm{pm}$ | $5: 00 \mathrm{pm}$ |
| Aira Force | - | $3: 15 \mathrm{pm}$ | - | $5: 15 \mathrm{pm}$ |
| Howtown | $2: 35 \mathrm{pm}$ | $3: 35 \mathrm{pm}$ | - | $5: 35 \mathrm{pm}$ |
| Pooley Bridge | 2:55pm | $4: 00 \mathrm{pm}$ | $4: 45 \mathrm{pm}$ | $6: 00: \mathrm{pm}$ |

Does each journey last the same amount of time?

How long does it take Boat C to get to Pooley Bridge?

1b. Look at the bus timetable below.

|  | Bus A | Bus B | Bus C | Bus D |
| :---: | :---: | :---: | :---: | :---: |
| Beeston | $7: 05$ | $8: 05$ | $9: 05$ | $10: 05$ |
| Infirmary St. | $7: 30$ | $8: 30$ | $9: 30$ | $10: 25$ |
| Headingley | $7: 50$ | $8: 50$ | $9: 50$ | $10: 40$ |
| Holt Park | $8: 00$ | $9: 00$ | $10: 00$ | $10: 50$ |

How long does it take for Bus D to get from Headingley to Holt Park?

Which bus takes the shortest amount of time to travel from Beeston to Holt Park?

2b. Here is a timetable for lake cruises.

| Leave Bowness | Arrive at Brockhole |
| :---: | :---: |
| $10: 30 \mathrm{am}$ | $10: 50 \mathrm{am}$ |
| $11: 25 \mathrm{am}$ | $11: 45 \mathrm{am}$ |
| $1: 00 \mathrm{pm}$ | $1: 20 \mathrm{pm}$ |

Does each journey last the same amount of time?

How long is the journey from Bowness to Brockhole?


## Year 5 Expected

4a. Look at the bus timetable below.

|  | Bus A | Bus B | Bus C | Bus D |
| :---: | :---: | :---: | :---: | :---: |
| Chester | $06: 45$ | $07: 15$ | $07: 45$ | $08: 15$ |
| Whitby Woods | $06: 57$ | $07: 27$ | $07: 58$ | $08: 27$ |
| Hooton | $07: 12$ | $07: 42$ | $08: 15$ | $08: 42$ |
| Eastham | $07: 14$ | $07: 44$ | $08: 18$ | $08: 44$ |
| Bromborough | $07: 18$ | $07: 48$ | $08: 23$ | $08: 48$ |
| Liverpool | $07: 43$ | $08: 13$ | $08: 49$ | $09: 13$ |

Which bus takes the longest amount of time to get from Chester to Liverpool?

How many seconds does it take to get from Hooton to Eastham on Bus B?

5 VF
$5 a$. Each train takes the same amount of time to travel between each station.

| London Euston | $18: 35$ |  | $19: 25$ | $19: 50$ |
| :---: | :---: | :---: | :---: | :---: |
| Watford | $18: 50$ | $19: 15$ |  |  |
| Milton Keynes |  | $19: 36$ | $\mathbf{2 0 : 0 1}$ |  |
| Coventry | $19: 46$ |  | $20: 36$ | $\mathbf{2 1 : 0 1}$ |
| Birmingham | $19: 57$ | $\mathbf{2 0 : 2 0}$ |  | $\mathbf{2 1 : 1 2}$ |

Calculate the missing times.

4b. Look at the bus timetable below.

|  | Bus A | Bus B | Bus C | Bus D |
| :---: | :---: | :---: | :---: | :---: |
| Huddersfield | $05: 45$ | $06: 50$ | $20: 05$ | $21: 35$ |
| Emley | $06: 13$ | $07: 18$ | $20: 33$ | $22: 03$ |
| Flockton | $06: 19$ | $07: 24$ | $20: 39$ | $22: 09$ |
| Overton | $06: 24$ | $07: 29$ | $20: 44$ | $22: 14$ |
| Wakefield | $06: 45$ | $07: 54$ | $21: 05$ | $22: 35$ |

On Bus A, how much longer does it take to get from Emley to Wakefield than to get from Huddersfield to Emley?
How many seconds longer does it take to get from Huddersfield to Wakefield on Bus B than the other buses?

5b. Each bus takes the same amount of time to travel between each station.

| Harrogate | $10: 05$ | $12: 15$ |  |
| :---: | :---: | :---: | :---: |
| Knaresborough | $10: 25$ |  | $13: 21$ |
| Farnham |  | $12: 49$ | $13: 35$ |
| Copgrove | $10: 55$ | $13: 05$ |  |
| Ripon | $11: 08$ |  | $14: 04$ |

Calculate the missing times.

5a．George thinks French is his longest lesson on Tuesday．

5b．Jo thinks Space Invaders is on for the longest amount of time over the week．

|  | $\begin{gathered} 13: 15 \\ - \\ 14: 15 \end{gathered}$ | $\begin{aligned} & 14: 15 \\ & - \\ & 15: 15 \end{aligned}$ |  | $\begin{gathered} 15: 15 \\ - \\ 16: 15 \end{gathered}$ |  | $\begin{gathered} 16: 15 \\ - \\ 17: 15 \end{gathered}$ | $\begin{gathered} 17: 15 \\ - \\ 18: 15 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Space Invaders | Super Chef |  | Quiz Master |  | Terry Trouble | The News |
| 辰 | Space Invaders |  | 空 | Quiz Master |  | $\stackrel{\text { I }}{\underline{\Xi}}$ | Inspector |
| $\underset{\text { in }}{\text { K }}$ | Terry Trouble | Super Chef |  | Quiz Master |  | Inspector | The News |
| 否 | Inspector | Quiz Master |  |  |  | Space Invaders |  |
| $\grave{2}$ | The News | Super Chef |  |  |  | Terry Trouble | Space Invaders |

Do you agree with her？Explain why．

6b．Simon thinks that the coach from New Moston to Chadderton takes 36 seconds．

| Manchester | $09: 17$ |
| :---: | :---: |
| Failsworth | $09: 38$ |
| New Moston | $09: 43$ |
| Chadderton | $09: 49$ |
| Bradford | $10: 16$ |

Do you agree？Explain why．

## Year 5 Greater Depth

7a. Look at the train timetable below.

|  | Train A | Train B | Train C | Train D |
| :---: | :---: | :---: | :---: | :---: |
| West Kirby | $18: 36$ | $19: 08$ | $19: 24$ | $19: 53$ |
| Hoylake | $18: 39$ | $19: 11$ | $19: 27$ | $19: 56$ |
| Leasowe | $18: 48$ | $19: 20$ | $19: 36$ | $20: 05$ |
| Birkenhead | $18: 54$ | $19: 26$ | $19: 42$ | $20: 11$ |
| Hamilton | $19: 01$ | $19: 33$ | $19: 49$ | $20: 18$ |
| Lime Street | $19: 08$ | $19: 40$ | $19: 56$ | $\mathbf{2 0 : 2 5}$ |

Train B is delayed for 17 minutes at Leasowe. What time will it arrive at the other stations?

How many more seconds does it take to get from Hamilton to Lime Street than West Kirby to Hoylake?

8 a. Each boat takes the same amount of time to travel between each pier.

| Bankside Pier |  | $12: 46$ | $13: 04$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Blackfriars Pier | $12: 22$ |  | $13: 07$ | $13: 31$ |
| Embankment Pier | $12: 29$ |  | $13: 14$ | $13: 38$ |
| Millbank Pier |  | $13: 04$ |  | $13: 46$ |
| Vauxhall Pier |  | $13: 07$ | $13: 25$ |  |
| Battersea Pier | $12: 43$ |  | $13: 28$ | $13: 52$ |

Calculate the missing times.

7b. Look at the bus timetable below.

|  | Bus A | Bus B | Bus C | Bus D |
| :---: | :---: | :---: | :---: | :---: |
| Lincoln | $05: 30$ | $05: 50$ | $06: 10$ | $06: 20$ |
| Waddington | $05: 46$ | $06: 07$ | $06: 27$ | $06: 48$ |
| Leadenham | $06: 04$ | $06: 25$ | $06: 45$ | $06: 59$ |
| Honington | $06: 21$ | $06: 42$ | $07: 02$ | $07: 26$ |
| Belton | $06: 27$ | $06: 52$ | $07: 12$ | $07: 38$ |
| Grantham | $06: 32$ | $06: 58$ | $07: 18$ | $07: 43$ |

Bus $C$ is delayed for 27 minutes and Bus D is delayed for 2 minutes. Which bus arrives at Grantham soonest?

How many more seconds does it take to get from Honington to Belton on Bus D than Bus B?

8b. Each train takes the same amount of time to travel between each station.

| Birmingham | $18: 33$ |  | $19: 27$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Coventry | $18: 49$ | $19: 12$ |  |  |
| Milton Keynes |  | $19: 27$ |  | $20: 16$ |
| Watford | $19: 47$ | $20: 10$ | $20: 41$ |  |
| London Euston | $19: 56$ |  | $20: 50$ | $21: 08$ |

Calculate the missing times.

8a．Bobby thinks he spends the most time studying English each week．

|  | $\begin{gathered} 9: 20 \\ - \\ 10: 20 \end{gathered}$ | $\begin{gathered} 10: 20 \\ - \\ 11: 20 \end{gathered}$ | $\begin{gathered} 11: 20 \\ - \\ 12: 20 \end{gathered}$ | $\begin{gathered} 12: 20 \\ - \\ 13: 20 \end{gathered}$ | $\begin{gathered} 13: 20 \\ - \\ 14: 20 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | English | Science | E | French | 高 | U 0 0 0 |
| 冎 | $\begin{aligned} & \text { 조 } \\ & \frac{1}{4} \end{aligned}$ | History |  | Art |  | u 0 0 $m$ |
| ${\underset{D}{\circ}}^{2}$ | Science | P．E． | Lunch | Maths | ［ | I |
| 귿 | P．E． |  | Lunch | Maths |  | 策 |
| $\sum$. | Art | 言 | Maths | Lunch | Englis |  |

Do you agree with him？Explain why．

9a．Georgia has created a timetable of her activities．She thinks she spends more than 5,000 seconds a day playing on her computer．

| Karate | TV | Homework | Computer | Reading |
| :---: | :---: | :---: | :---: | :---: |
| $09: 45$ | $13: 25$ | $16: 34$ | $18: 53$ | $20: 45$ |
| - | - | - | - | - |
| $11: 30$ | $15: 58$ | $17: 39$ | $20: 24$ | $21: 10$ |

Do you agree with her？Explain why．

8b．Zak thinks The Island is on for the longest amount of time over the week．


Do you agree with him？Explain why．
q ．Hashim thinks that the coach from London Victoria to Luton Airport takes 1,260 seconds．

| London Victoria | $14: 32$ |
| :---: | :---: |
| Marble Arch | $14: 41$ |
| Baker Street | $14: 46$ |
| St John＇s Wood | $14: 51$ |
| Golders Green | $15: 08$ |
| Luton Airport | $15: 53$ |

Do you agree with him？Explain why．

