# Varied Fluency Step 6: Timetables

## **National Curriculum Objectives:**

Mathematics Year 5: (5M4) Solve problems involving converting between units of time

#### Differentiation:

Developing Questions to support reading timetables, including converting between hours and minutes. Times in intervals of 10 minutes, within one hour and using the 12 hour clock. Expected Questions to support reading timetables including converting between hours and minutes or minutes and seconds. Time in intervals of 5 or 10 minutes, beyond one hour and using the 24 hour clock.

Greater Depth Questions to support reading timetables including converting between hours and minutes or minutes and seconds. Time in intervals of 1 minute, sometimes beyond one day and using the 24 hour clock.

More Year 5 Converting Units resources.

Did you like this resource? Don't forget to review it on our website.



# **Timetables**

# **Timetables**

Bus B

8:00

Bus C

9:00

9:20

9:40

9:50

Bus D

10:00

10:10

10:30

10:40

1b. Look at the bus timetable below.

Bus A

7:00

1a. Look at the bus timetable below.

	Bus A	Bus B	Bus C	Bus D
Prestwich	9:10	10:10	11:00	12:00
Carr Clough	9:20	10:20	11:10	12:10
Kersal	9:30	10:30	11:20	12:20
Cromwell St.	9:40	10:40	11:30	12:30
Manchester	9:50	10:50	11:50	12:40

Infirmary St. 7:20 8:20 Headingley 7:40 8:40 **Holt Park** 7:50 9:50

**Beeston** 

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

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

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

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





2a. Here is a timetable for lake cruises. Does each journey last the same amount of time?

	Boat A	Boat B	Boat C	Boat D
Glenridding	2:00	3:00	4:00	5:00
Aira Force	-	3:10	-	5:10
Howtown	2:30	3:30	-	5:30
Pooley Bridge	2:50	3:50	4:40	5:50

2b. Here is a timetable for lake cruises. Does each journey last the same amount of time?

Leave Bowness	Arrive at Brockhole
10:30	10:50
11:20	11:40
13:00	13:20

How long does it take Boat C to get from

Glenridding to Pooley Bridge?



Brockhole?

3a. Football Club lasts ten minutes longer than Tennis Club. What time should Football Club end?

Cricket	Hockey	Tennis	Dance	Football
9:00am	9:00am	9:10am	9:30am	9:00am
_	_	-	_	_
9:30am	9:40am	9:40am	9:50am	?

3b. Talented lasts 20 minutes longer than Dance Off. What time should Dance Off end?

How long is the journey from Bowness to

	Talented	Clock Beat	News	Dance Off
	4:00pm	5:00pm	5:30pm	7:00pm
l	_	_	_	-
	5:00pm	6:00pm	6:00pm	?





# **Timetables**

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4a. Look at the bus timetable below.

	Bus A	Bus B	Bus C	Bus D
Chester	06:45	07:15	07:45	08:15
Capenhurst	06:50	07:20	07:50	08:20
Hooton	07:05	07:35	08:05	08:35
Eastham	07:15	07:45	08:15	08:45
Bromborough	07:20	07:50	08:20	08:50
Liverpool	07:45	08:15	08:55	09:15

4b. Look at the bus timetable below.

	Bus A	Bus B	Bus C	Bus D
Huddersfield	06:00	06:50	08:10	09:15
Emley	06:15	07:20	08:25	09:30
Flockton	06:20	07:25	08:30	09:35
Overton	06:25	07:30	08:35	09:40
Wakefield	06:45	07:40	08:55	10:00

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?

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 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		19:35	20:00	
Coventry	19:45		20:35	21:00
Birmingham	20:00	20:25		21:15

5a. Each train takes the same amount of

time to travel between each station.

Harrogate	10:05	12:15	13:25	
Knaresborough	10:25		13:45	14:55
Farnham	10:35		13:55	
Copgrove		13:00		15:20
Ripon	11:00	13:10	14:20	

Calculate the missing times.

Calculate the missing times.





6a. Pilates lasts 15 minutes longer than Aerobics. What time does Aerobics start?

Aerobics	Yoga	Pilates	Zumba	Karate
?	18:05	19:25	20:30	21:00
_	_	_	_	_
18:05	19:25	20:30	21:00	21:45

6b. Star Factor lasts ten minutes longer than Cake Bake. What time does Star Factor end?

Footy Fever	Cake Bake	News	Star Factor
13:25	16:20	17:15	17:50
_	_	_	_
14:20	16:55	18:00	?





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# **Timetables**

### **Timetables**

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	20:25

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?

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?



8a. 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

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

Birmingham	22:33		23:27	
Coventry	22:49	23:12		
Milton Keynes		23:27		00:16
Watford	23:47	00:10	00:41	
London Euston	23:56		00:50	01:08

Calculate the missing times.



9a. Ballet lasts 18 minutes longer than Street Dance and ends 14 minutes before Tap begins. What time should Ballet start and end?

Ballet	Тар	Street	Ballroom
?	13:45	15:05	15:55
_	-	-	_
?	14:10	15:55	16:45

Calculate the missing times.



9b. Life lasts 16 minutes longer than Top Car and ends 12 minutes before The Hunt begins. What time should Life start and end?

Life	The Hunt	News	Top Car
?	13:45	15:05	15:55
_	-	-	-
?	14:10	15:55	16:45





## **Varied Fluency Timetables**

#### **Varied Fluency Timetables**

**Developing** 

1a. 20 minutes; A, B and D

2a. No: 40 minutes

3a. 9:40am

**Expected** 

4a. C: 600 seconds

5a.

2, 555 55 55 55					
London Euston	18:35	19:00	19:25	19:50	
Watford	18:50	19:15	19:40	20:05	
Milton Keynes	19:10	19:35	20:00	20:25	
Coventry	19:45	20:10	20:35	21:00	
Birmingham	20:00	20:25	20:50	21:15	

6a. 17:15

**Greater Depth** 

7a. Birkenhead – 19:43; Hamilton – 19:50; Lime Street - 19:57; 240 seconds

8a.

Bankside Pier	12:19	12:46	13:04	13:28
Blackfriars Pier	12:22	12:49	13:07	13:31
Embankment Pier	12:29	12:56	13:14	13:38
Millbank Pier	12:37	13:04	13:22	13:46
Vauxhall Pier	12:40	13:07	13:25	13:49
Battersea Pier	12:43	13:10	13:28	13:52

9a. 12:23 - 13:31

#### **Developing**

1b. 10 minutes; D 2b. Yes; 20 minutes

3b. 7:40pm

#### **Expected**

4b. 15 minutes: 300 seconds

5b.

. 10 111110100; 000 00001100					
).	Harrogate	10:05	12:15	13:25	14:35
	Knaresborough	10:25	12:35	13:45	14:55
	Farnham	10:35	12:45	13:55	15:05
	Copgrove	10:50	13:00	14:10	15:20
	Ripon	11:00	13:10	14:20	15:30

6b. 18:35

#### **Greater Depth**

7b. Both buses arrive at the same time (07:45); 120 seconds

8b

).	Birmingham	22:33	22:56	23:27	23:45
	Coventry	22:49	23:12	23:43	00:01
	Milton Keynes	23:04	23:27	23:58	00:16
	Watford	23:47	00:10	00:41	00:59
	London Euston	23:56	00:19	00:50	01:08

9b. 12:27 - 13:33