Calculating time intervals on timetables Worksheet

Mr Ward

Time will be a focus for today's lesson.
Can you match the times?

One o'clock in the morning

01:00

3 p.m.

1 a.m.

Ten o'clock at night

22:00

10 p.m.

15:00

Three o'clock in the afternoon

Let’s complete the missing information
How would we work out the time interval?

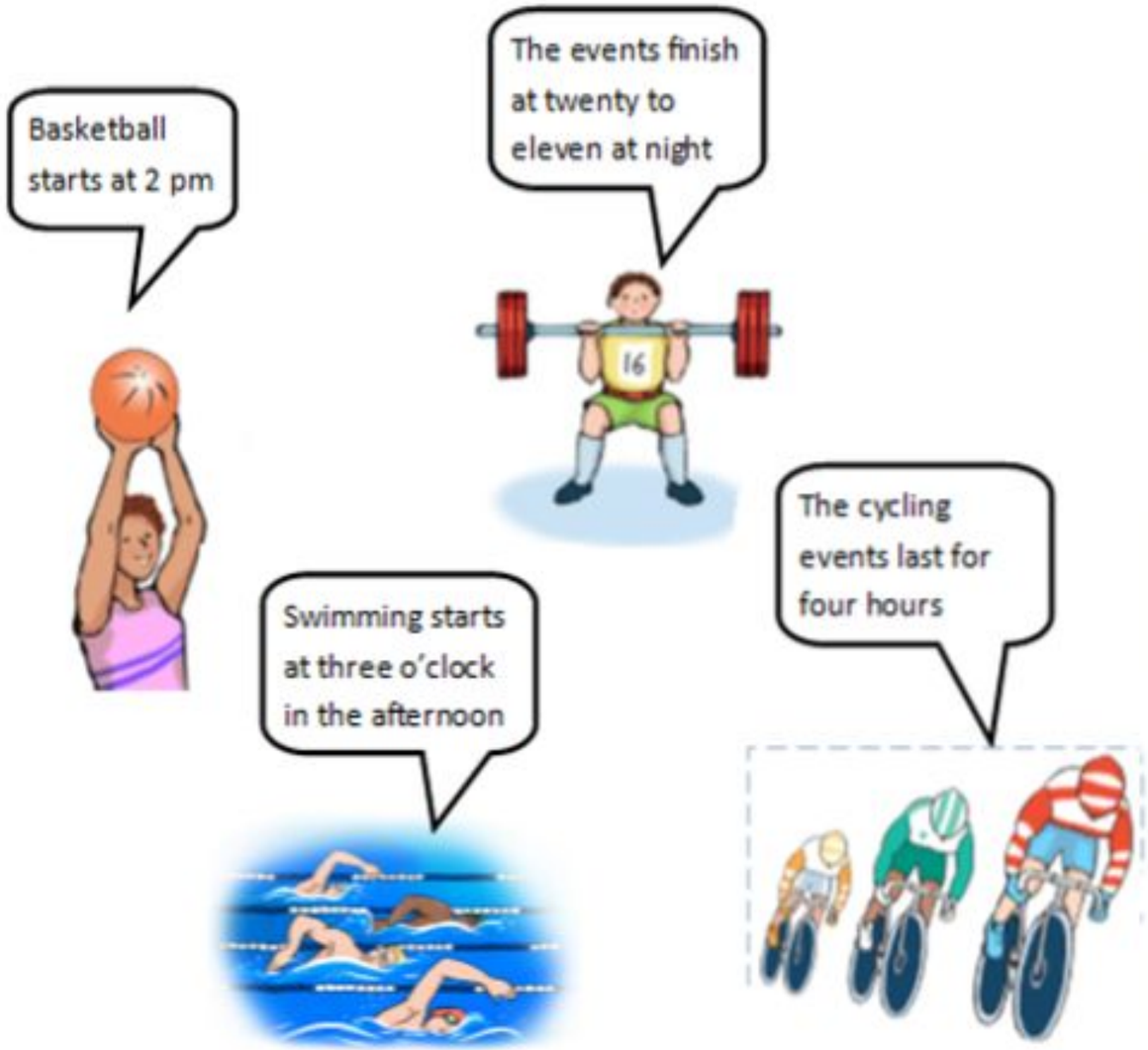
Key Info

The basketball starts at 2pm

The swimming starts at one o’clock in the afternoon.

Events on Saturday 6th August			
Sport	**Start time**	**Finish time**	**Duration**
Basketball			9 h 30 mins
Cycling	11:30		6 h 30 mins
Rowing		13:30	3 hours
Swimming		17:40	

Talk Task - Use the information to complete the timetable



Events on Sunday 7th August			
Sport	**Start time**	**Finish time**	**Duration**
Basketball		23:30	
Cycling	14:15		4 hours
Swimming		19:10	
Weightlifting	16:00		

Complete the missing information in the tables
Consider using number lines to help work out time intervals

Rowing events on Saturday 6th August			
Event	Start time	Finish time	Duration
Men's single sculls heats	10:30	11:27	
Women's single sculls heats	11:30		57 mins
Men's pair heats		13:12	27 mins
Women's double sculls heats	13:15	13:47	
Men's Double sculls heats	13:50	14:17	
Men's quadruple sculls heats		15:07	
Women's quadruple sculls heats	15:10	15:27	

This started at ten to three.

This lasted half an hour.

The last event finished 2 hours and 38 mins after the first event started.

Swimming events on Saturday 6th August			
Event	Start time	Finish time	Duration
Men's 400 m medley	15:02		24 mins
Women's 100 m butterfly	15:28	15:46	
Men's 400 m freestyle		16:30	42 mins
Women's 400 m medley	16:32		
Men's 100 m breaststroke	17:04	17:22	
Women's 4 x 100 m freestyle relay			16 mins

Timetable A

Rowing events on Saturday 6th August			
Event	Start time	Finish time	Duration
Men's single sculls heats	10:30	11:27	
Women's single sculls heats	11:30		57 mins
Men's pair heats		13:12	27 mins
Women's double sculls heats	13:15	13:47	
Men's Double sculls heats	13:50	14:17	
Men's quadruple sculls heats		15:07	
Women's quadruple sculls heats	15:10	15:27	

This started at ten to three.

Timetable B

Swimming events on Saturday 6th August			
Event	Start time	Finish time	Duration
Men's 400 m medley	15:02		24 mins
Women's 100 m butterfly	15:28	15:46	
Men's 400 m freestyle		16:30	42 mins
Women's 400 m medley	16:32		
Men's 100 m breaststroke	17:04	17:22	
Women's 4 x 100 m freestyle relay			16 mins

This lasted half an hour.

The last event finished 2 hours and 38 mins after the first event started.

Challenge Slide

$$\begin{array}{r} 11{:}30 \\ +\ \ 57 \\ \hline 11{:}87 \end{array}$$

$$\begin{array}{r} 1\overset{3}{\cancel{4}}{:}\overset{1}{1}7 \\ -\ 13{:}50 \\ \hline 00{:}67 \end{array}$$

Ahmad loves using formal calculations. When asked to work out time intervals using a 24 hour digital clock, he decided to use written addition and subtraction because they are methods he is confident with.

1. **Was he right to use these methods? Right down your reasoning.**
2. **Can you use a number line to demonstrate how you would answer the questions.**