

Max's Time-Travelling Maths Challenge

Learning objective: To calculate intervals of time, convert between units, and solve problems involving durations across 12-hour and 24-hour clocks.

Help Max the monkey solve these time-based puzzles. Remember to show your working out clearly, especially when converting between hours and minutes.

Word bank: duration · interval · am · pm · 24-hour clock · elapsed time

1. Max starts his maths puzzle at 08:45 and finishes at 10:15. How long did he spend solving the puzzle in hours and minutes? (2 marks)

2. A train journey from London to Edinburgh departs at 14:20 and arrives at 18:05. What is the total duration of the journey? (2 marks)

3. Pip the caterpillar reads for 145 minutes. How many hours and minutes is this in total? (2 marks)

4. If a concert starts at 19:30 and lasts for 2 hours and 45 minutes, what time does it finish? Give your answer in 24-hour format. (2 marks)

5. Zara is painting a mural. She starts at 09:15 and stops for a lunch break at 12:30. She then paints for another 1 hour and 50 minutes. How much time did she spend painting in total? (3 marks)

Draw: Draw a traditional clock face showing the time 16:45, and next to it, draw a digital clock showing the same time in 24-hour format.



Extension challenge: Max has a digital stopwatch. If he starts a race at 11:55 am and finishes at 1:10 pm, calculate how many minutes the race lasted. Can you convert this into hours and minutes?