

Max's Magnificent Time-Keeping Challenge

Learning objective: To read, write and convert time between analogue and digital 12-hour and 24-hour clocks, and calculate durations of time.

Max the monkey is organising a jungle sports day and needs your help to keep track of the schedule! Read each question carefully and select or write the correct answer. Remember: there are 60 seconds in a minute, 60 minutes in an hour, and 24 hours in a day.

Answer Key: 1) C (14:30), 2) True, 3) 45 minutes, 4) B (11:50), 5) False, 6) 3 hours and 15 minutes, 7) A (18:00), 8) 120 minutes, 9) True, 10) 09:15. Greater Depth Reasoning: When converting to 24-hour time, remember that any time after 12:00pm (noon) requires adding 12 to the hour value. If the duration crosses over the hour, ensure you account for the 60-minute cycle rather than using base-10.

Word bank: analogue · digital · duration · midnight · midday · interval · fortnight

1. Max starts the hurdle race at 2:30 pm. Which is the correct 24-hour clock time? A) 02:30, B) 12:30, C) 14:30*, D) 26:30 (1 mark)

2. True or False: A digital clock showing 00:15 is in the morning, just after midnight. (1 mark)

3. The long jump event finishes at 10:45 am after starting at 10:00 am. What was the duration of the event? (1 mark)

4. Which digital time matches ten to twelve in the morning? A) 10:50, B) 11:50*, C) 12:10, D) 09:50 (1 mark)

5. True or False: There are 1,440 minutes in a full day. (1 mark)

6. The relay race began at 09:00 and finished at 12:15. How long did the race last? (1 mark)

7. The evening prize ceremony begins at 6 o'clock in the evening. How is this written in 24-hour format? A) 18:00*, B) 06:00, C) 20:00, D) 16:00 (1 mark)

8. How many minutes are there in 2 hours? (1 mark)

9. True or False: 08:30 is the same as half past eight in the morning. (1 mark)

10. If a program starts at 08:45 and lasts for 30 minutes, what time will it finish? (Write in 24-hour format). (1 mark)

Draw: Draw an analogue clock face showing the time 4:20 pm. Label the hour hand and the minute hand clearly.



Extension challenge: 1. Explain why we add 12 to the hour when converting afternoon times to the 24-hour clock. 2. Compare and contrast an analogue clock and a digital clock—which is easier to read for duration calculations and why? 3. Justify why a 'fortnight' is a useful unit of time in a calendar. 4. If a train journey takes 130 minutes, how many hours and minutes is that? 5. What might happen if the world stopped using 24-hour time for international flights? 6. Design a personal schedule for your Saturday, ensuring you calculate the duration of at least four different activities.