Max’s Time-Travelling Workshop

Learning objective: To calculate intervals of time and represent duration on an analogue clock face.

Follow the steps below to complete your diagram. Use a ruler for straight lines and ensure your clock face is clear and accurate.

Draw: Draw a large, circular analogue clock face in the centre of your page. The clock should show the time 09:35. Around the outside of the clock, draw three small gears of different sizes to decorate Max's workshop. Use a pencil to shade the area between the 12 and the 3 on the clock face to represent a 15-minute quarter-hour block.

Label words: Minute hand · Hour hand · Interval · Duration · Elapsed time · Analogue display

Steps:

1. Max starts his clock-making project at 09:15. If he finishes at 10:40, how long did he spend working? Show your calculation.

2. Label the minute hand and the hour hand on the clock you have drawn for the time 08:50.

3. If a small gear takes 45 seconds to spin once, how many seconds does it take for the gear to spin 4 times?

4. Max is planning a trip. His train leaves at 14:25 and arrives at 16:10. Calculate the total duration of the journey in hours and minutes.

5. Draw an arrow on your clock face representing a 15-minute interval moving clockwise from the 3 to the 6.