Data Detectives: Analysing Our School World

Success criteria (tick when done)

[ ] I have used a clear title for my graph.
[ ] I have labelled both the x-axis and the y-axis.
[ ] I have used a ruler to draw straight, accurate bars.
[ ] I have checked that my scale is consistent (e.g., going up in 2s or 5s).
[ ] I have ensured my data matches the numbers provided.

What to expect at this age

Year 6 pupils should be able to present discrete data clearly using appropriate scales and labels. They should demonstrate an understanding of how to organise information so that others can read it easily.

Good, better, best: model responses

Good: A bar chart with bars for hedgehogs (4), foxes (2), and robins (6). It has a title 'Animals in the Garden' and labels on the sides.

It shows the basic requirements of a graph: data representation and a title.

Better: A neat bar chart with a title, labelled axes, and a consistent scale of 2s. The bars are spaced evenly and the data is accurate to the prompt.

It shows a better understanding of mathematical conventions like consistent scales and spacing.

Best: A professional-looking bar chart with a clear title, labelled axes (e.g., 'Number of Animals' and 'Animal Type'), a consistent scale, and a small key. The presentation is very tidy and easy to interpret.

It demonstrates high attention to detail, clear communication of data, and excellent presentation skills.

What a secure answer looks like

Focus on the importance of the 'y-axis' scale. Ensure students understand that the gaps between bars must be equal to maintain accuracy.

If your child is stuck

Ask your child, 'If you were looking at this graph for the first time, would you know what it is about without me telling you?' This helps them see the need for titles and labels.

Common mistakes to watch for

Children often forget to label the axes or use inconsistent intervals on their scale (e.g., 0, 1, 5, 10). Remind them that the distance between numbers on the axis must always be the same.