

Dot Plots and Histograms

6th Grade

Two graphs that look similar and answer different questions.

DOT PLOT

- One dot per data value
- Shows every individual value
- Best for small data sets
- You can read exact values off it
- Gaps and clusters are obvious

HISTOGRAM

- Bars showing how many fall in a range
- Individual values are lost
- Best for large data sets
- Bars touch — the data is continuous
- Shows the shape of the distribution

THE DIFFERENCE THAT MATTERS

A bar chart has gaps between bars because the categories are separate. A histogram's bars touch because the ranges join up.

Choose the bin width carefully. Too wide hides the shape; too narrow makes it noise.