



Histograms

Grouping values into bins

- Today: build and read a histogram, and know what it hides.

28 test scores

• 60–69: 3 • 70–79: 8 • 80–89: 12 • 90–99: 5

Turn & talk: what was the highest score?

Equal bins, bars that touch

- Each bin covers the same width — here, ten scores.
- Height = how many values fall in that interval.

You cannot answer the question

- Five students scored somewhere in 90–99.
- Maybe nobody scored 99 at all.

Binning keeps the counts and throws away the values.

Why the bars touch

- The axis is a NUMBER LINE — 69 runs straight into 70.
- A bar graph shows separate categories, so gaps are right there.

Reorder a bar graph and it still works. Reorder a histogram and it breaks.

Your turn

- How many students scored at least 70?
- Thumbs up when you have it.

Bin width is a CHOICE

- Same 28 scores in two wide bins: 60–79 has 11, 80–99 has 17.
- Simpler shape, less detail. Neither version is wrong.

Always say what your bin width is.

Now you

- → In-class practice sheet