

MATH · Y3-Y6

# Bar Models — Reference Poster

The four main types in one place

## Use which bar model

Pick the type that matches your

- WHOLE-PARTS: total split into pieces. Use when you know the whole and find a part, or know parts and find the whole. Example: 'There are 30 children. 18 are girls. How many boys?'
- COMPARISON: two amounts side by side. Use when one thing is more or less than another. Example: 'Sam has 12 stickers. Tom has 5 fewer.'
- EQUAL GROUPS: same-sized bars repeated. Use for multiplication, division and sharing. Example: '4 children share 24 sweets.'
- RATIO: bars in proportion. Use when amounts are in a given ratio. Example: '£30 shared in ratio 2:3.'

## Draw any bar model

Three steps that work every

- 1. READ THE PROBLEM. Underline the numbers and what's being asked.
- 2. CHOOSE THE TYPE. Whole-parts? Comparison? Equal groups? Ratio?
- 3. DRAW THE BAR. Match the size of the bar roughly to the size of the number.
- Then label the parts you know, mark the unknown with a question mark, and work out the calculation.
- Bar models reveal the OPERATION you need. Once the picture is right, the maths is usually easy.



