



ALL IN ONE PLACE BASE CAMP BACKWARD DESIGN EXAMPLE

Assessing percentage and fractions



Backward Design

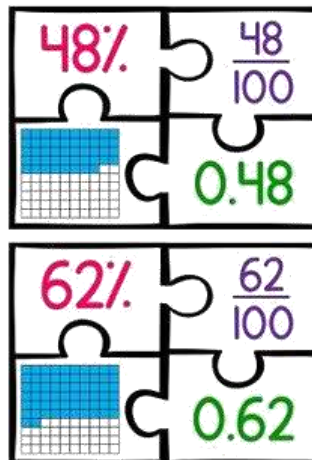
The example illustrates a simple backward design strategy for teaching percentage.

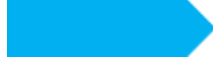
EXAMPLE

You want students to understand that percentage is part of a whole. Let's say there are two desired learning outcomes or success criteria.

- **Outcome 1: recognize the relationship between percentage and fractions**
- **Outcome 2: explain why a percentage is a part of a whole**

Using backward design, you first decide how to assess the outcomes. This means what a student need to do to demonstrate they have attained the outcome.





ASSESSING THE OUTCOMES

Two simple tasks could be used to assess the outcomes.

- ▶ A student is given two squares of the same size. They have to shade 50% of one square and $\frac{1}{2}$ of the other square. When they recognize that the shaded areas are identical, they have attained **Outcome 1**.



- ▶ A student is given a 10 by 10 grid. 20 of the grid cells are coloured. They have to use the grid to explain why percentage is part of a whole. If the student tells that the grid has 100 cells, that represent a whole, and the 20 coloured cells represent $\frac{20}{100}$ or 20% of the grid, they have attained **Outcome 2**.

Jump Ahead and Backward Design

All Jump Ahead English and Mathematics activities use principles of backward design. Learning outcomes or success criteria are based on the National Curriculum Standards for Key Stage 2, Key Stage 3 and GCSE, and the CE standards set by the ISEB.