Structures of Equality Explained

What is a Structure of Equality?

- 1. It is a graphic organizer.
- 2. It is a representation of equality.
- 3. It has values and labels.
- 4. It represents the structure or relationships occurring in a math story.

Parts Equal Total Structure of Equality

Parts Equal Total Structures (bar models/tape models) are helpful if a math story describes 2 or more parts being put together (composed) to form a total or when a story describes a total being taken apart (decomposed) into 2 or more parts. **Example:** Ms. Felder has 8 balloons. Three are red. The rest are yellow. How many balloons are yellow?



Compare Structure of Equality

Compare Structures (bar models/tape models) are helpful if a math story describes a situation where quantities are being compared. (Sometimes the question asks for the smaller value when given the larger value and the difference. Sometimes the question asks for the difference between two values and sometimes the question will ask for the larger value when the smaller value and the difference are given.)

Example: There are 5 blue cars and 3 white cars in the parking lot. How many more blue cars are there than white cars in the parking lot?



Repeated Equal Groups Structure of Equality

Repeated Equal Group Structures (arrays or area models) are helpful if a math story describes putting equal groups together or taking equal groups apart (compose/decompose).

Example: There are 4 bags with 2 oranges in each bag. How many oranges are there in all?



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