DIVISION

Division is an essential concept in mathematics. It's a way to split a number into equal parts.

A DEFINITIONS

Definition Division

Division is the process of splitting a number into equal parts or groups. The $\div$ symbol indicates division.Division can be represented in several ways:

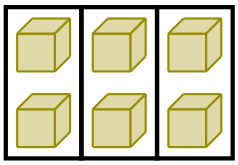
- **Numbers**:

$$6 \div 3 = 2$$

- **Words**:

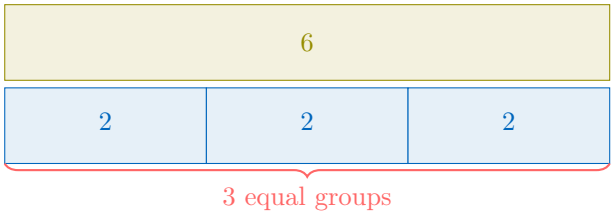
six divided by **three** equals **two**

- **Items**:



$6 \div 3 = 2$: number of blocks in each group

- **Part-whole model**:



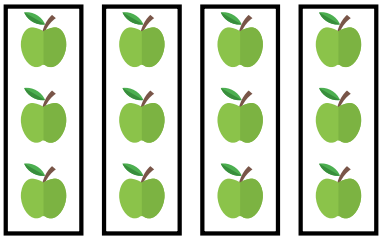
B REPRESENTATIONS OF DIVISION

Method Number of items in each group

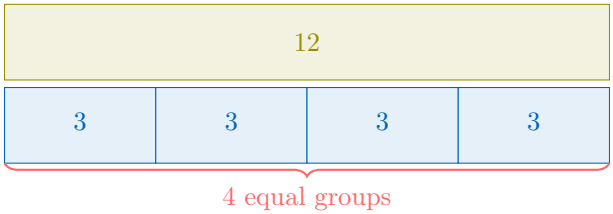
When you know the total and the number of groups, division finds the number of items in each group.

$$\text{total} \div \text{number of groups} = \text{number of items in each group}$$

For example, we have 12 apples, equally shared among 4 friends.



Each friend receives $12 \div 4 = 3$ apples.

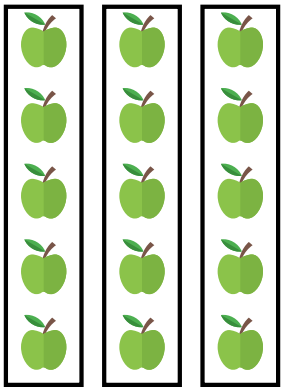


Method **Number of groups**

If you know the total and the number of items in each group, division finds the number of groups.

$$\text{total} \div \text{number of items in each group} = \text{number of groups}$$

For example, we have 15 apples and pack them into boxes, each holding 5 apples.



Thus, $15 \div 5 = 3$ is the number of boxes.

C INVERSE OPERATIONS: MULTIPLICATION AND DIVISION

Proposition **Multiplication and Division are Inverse Operations**

Multiplication and division undo each other:

$$3 \times 2 = 6$$
$$6 \div 3 = 2$$
$$6 \div 2 = 3$$