

Unitary Method

Learning Objective:

- Calculate the value of many objects of the same kind when the value of one of these objects is given.
- Calculate the value of one object of the same kind when value of many of these objects are given.
- Calculate the value of many objects of the same kind when the value of some of these is given.

Let's Talk Math:

- Explain that unitary method is a process by which we find the value of a single unit using the values of multiple units, and the value of multiple units using the value of single unit.
- Unitary method is used in solving variation problems in our daily life. For example, it helps find the number of people required to complete a given task.

Make Sure You Have:

- Books
- Recipe Cards

Activity: Pages in a Pile

Duration: 1 Lesson

Whole Class Activity

Let's Try It:

- Collect at least 10 copies of the same book (textbook or otherwise).
- Place one book in front of the class.
- Ask pupils to find out the number of pages in the book.
- Write the number of pages on the board (e.g., 100 pages).
- Add four more books on top of the first one, making a total of 5 books.
- Ask pupils to calculate the total number of pages in the pile (5 books x 100 pages = 500 pages).
- Explain that this calculation involves the unitary method.
- Write on the board: 'Number of pages = Number of books x Pages per book.'
- Add three more books to the pile (total 8 books) and ask a pupil to calculate the total pages for 8 books.
- Have the pupils explain their calculation to their peers (8 books x 100 pages = 800 pages).

Assessment: Prepare an activity sheet as shown below. Provide the activity sheet to each pupil to work individually.

Task 1:

1. 40 copies in 8 minutes = $40 \div 8 = 5$ copies per minute
2. 30 pints of juice in 5 containers = $\frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$ pints per container
3. 5 tanks with 265 fish = $\frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$ fish per tank
4. 4 trays with 48 ice cubes = $\frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$ ice cubes per tray
5. 4 boxes can hold 40 books = $\frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$ books per box
6. 5 game controllers had 25 buttons = $\frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$ buttons per

Task 2: Next ask pupils to make their own list of items of their choice along with their price. Swap the sheet with their peer, who will solve it. Peer check answers.