Key Words for Calculations

Overview

Words to do with arithmetic such as add, multiply, subtract, divide are not often used in ordinary conversation. As a result many people, especially those from other language backgrounds, have not acquired this vocabulary and are confused in mathematical learning situations.

This activity promotes discussion of the arithmetic related words, practice at hearing and speaking them and relating them to the appropriate symbols and calculator keys.

Skills and Knowledge

Language of basic operations (+ $- \times \div =$).

Use of calculator for basic operations

Preparation and Materials

Photocopy *Activity Sheets 1 & 3* (1 per pair of students)

Photocopy Activity Sheet 2: Key Words onto stiff paper or card, cut them into small cards and place in labelled envelopes (1 for each pair of students).

Calculators (1 per pair).

Suggested Procedure

Introducing Key Words

Distribute calculators (1 per pair of students)

Distribute Activity Sheet 1: What Operation?

Explain:

- Look at the pictures
- Work out your answers any way you like
- You can use calculators, but you don't have to
- Write your answers in the space provided next to 'How much'

Go through the illustrations one by one.

Ask:

- What answer did you get?
- What did you do?
- What language did you think in?
- What were the words that you used in your first language?

It is a good idea to discuss some of the words students were 'thinking'; ask for volunteers to write their own language on the board. Spend some time on discussion and comparison of words before continuing with the activity.

This introduction allows students to show the simple arithmetical calculations they can already do before focusing on language & symbols.



Now refer students to the empty calculator button and for each illustration ask:

- What is the sign or symbol that will go on this calculator button?
- What sign or symbol do we use instead of these words

For each illustration the class should:

- Agree on the arithmetic answer
- Briefly discuss the words
- Agree on the symbol to place in the empty calculator button.

'Symbol' is an important mathematical word to spend some time discussing.

Key word sorting

Distribute envelopes of cut up symbols and words (one to each pair of students). If appropriate, you could pair people of similar language backgrounds.

Explain:

- You are to work in pairs
- Use one copy of Activity Sheet 1 between you
- Arrange the words and symbols beside the correct picture

After 5 or so minutes to discuss their results and see if all agree on which words and symbols go together.

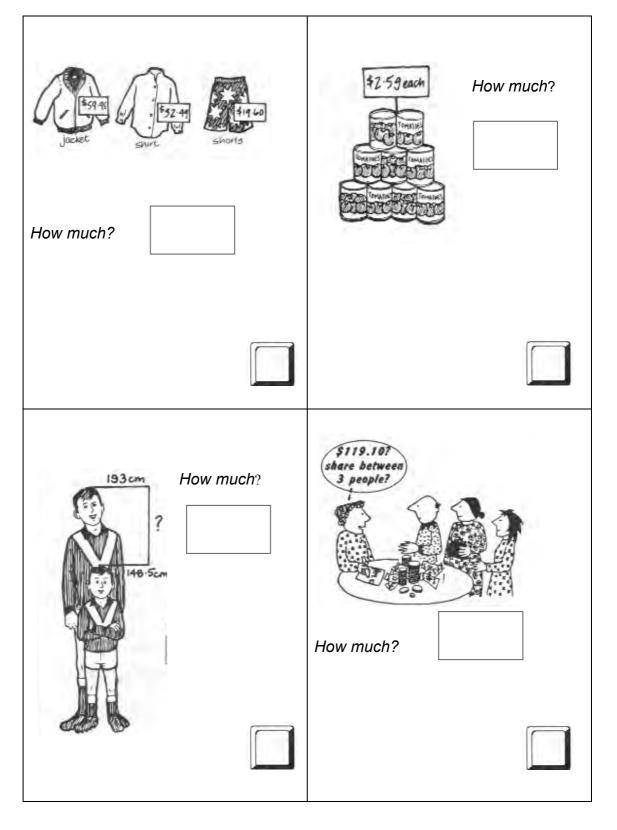
Distribute the *Key Words Summary Sheet*. Allow time for students to write in the blank spaces any other key words they used in English or their own language.

Explain:

Take this home and put it on your fridge or similar to help you learn the words.

Practice Sheet 1 is a reinforcement of this activity. It could be used now or as a revision in a later session.







Copy onto card and cut.

and	from	add
multiply	plus	times
take away	by	subtract
divide	minus	into
is	makes	equals
+		×
•	=	total



add plus total and



times multiply by

Your words:

Your words:



take away minus subtract from



divide into

Your words:

Your words:



equals makes is

Your words:



Write the symbol from your calculator in each square.

add	zero	
subtract	times	
multiply	is	
minus	take away	
plus	by	
divide	makes	
equals	into	
from	and	
total	point	

