

Bead Strings

Level: F-2 (and beyond)

Learning Objective:

Use bead strings to model numbers in different ways.

Intended Outcome:

Students 'trust' the count and can explain their thinking, i.e. they do not need to count all the beads to represent the number.

Materials and How to make the Bead Strings:

- Use beads of equal size, such as Pony Beads
- For the cord use a bead string or a shoe lace for easy threading
- Choose two colours (bead strings of many different colours can confuse children)
- Place groups of 5 or 10 beads together before changing colours – this helps children to count the beads
- Start with at least 30 beads on the string
- Tie a loop in the end for easy storage or display

Game Objective:

To use beads to model numbers.

Instructions:

- Each student holds their bead string in front of them
- Teacher names a number, for example, "Show me 7"
- Students use their bead strings to model the number
- Teacher asks students to explain how they know they are showing that number
- Student replies, "I know 5 and 2 makes 7"
- Teacher prompts students to show the number another way

Whole Class Activity: I wish I had... *

- Students stand in a circle with their bead string
- Teacher begins with a statement like, "I have 10 beads"
- All students show 10 beads on their string
- Teacher now says, "I wish I had 9" – all students change their bead strings to show the new number
- The next student in the circle continues the game "I have 9 beads, I wish I had 12"
- All students model the new number
- This process of identifying and changing the number of beads continues
- A discussion about the various methods students use to make and move between the different numbers can take place during and after the activity

Additional Information:

A useful booklet to share with teachers and parents regarding the use of bead strings can be accessed from the website.

* This task was adapted from the book:

Wright, R. J., Ellemor-Collins, D. & Tabor, P. D. (2012). *Developing number knowledge: Assessment, teaching & intervention with 7-11-year-olds*. London: SAGE Publications.