

Natural Equations

Use natural materials to represent numbers for some simple outdoor algebra

9 - 12

Number Processes



Background

This is essentially an introduction to the concept of **algebra** by representing the numbers in **equations** with natural materials.

The method could equally be applied to more complex **formulae** in **Mathematics** or **Science**.

The same principle of using symbols can be applied to **Literacy** work for the practise of **phonemes**, **homonyms**, **prefixes** and **suffixes**.

Equipment

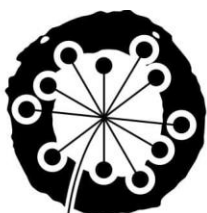
- Flat tarmac space large enough for different groups of pupils to use
- Chalk
- Activity sheet for each group

Activity

1. Give each group the equations sheet and demonstrate how the materials from the key can be laid out as a sum, using the chalk to write in the functions and the answer.
2. Challenge the groups to source their own natural materials and lay out the equations themselves.

Extension

More able students may do this without the sheet. They can make up their own sums using natural materials and attempt to work out what number each material represents in each other's sums.



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Natural Equations

Key

A leaf = 1

A stick = 5

A stone = 7

A seed = 10

A nut = 12

Your challenge is to make up a sum where
the answer is:

6

82

13

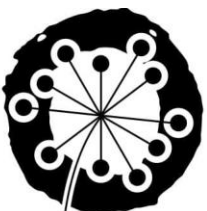
84

14

120

25

16.8



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