

Approach: Station

Level: Year 8 only

Focus: Given information about chemical properties of three substances, identify samples of the substances.

Resources: Jars of icing sugar, cornflour, cream of tartar, 3 clean teaspoons, 3 spatulas, 3 small beakers, water in measuring jug, 3 pieces of blue litmus paper, paper towels.

Questions/instructions:

The label has been left off three jars in the kitchen.
You are to try and find out what is in each jar.

You have three jars.

In one jar is cornflour.

In one jar is icing sugar.

In one jar is cream of tartar.

You need to test to find out which substance is in each jar.

Do not taste the unknown substances.

Here are three clues to help you:

1. Cream of tartar is an acid.
2. Acids turn blue litmus paper pink.
3. Cornflour does not dissolve in water.

You will need to test each substance to find out what it is.

1. Put half a teaspoon of each substance into separate beakers. Use a clean spoon each time. Add about 2 cms of water and stir well with a spatula.

The substance in jar A is —

The substance in jar B is —

The substance in jar C is —

Number correct: 3

2

1

0

% responses
1999 ('95) 1999 ('95)
year 8

58 (53)

0 (1)

27 (37)

15 (9)

Commentary:

Students particularly enjoyed this task. The 1999 and 1995 year 8 students had very similar levels of success with this task.