Positive and negative numbers (the spaceship game) – Robert

Objectives

The relevant framework objective is:

- recognise negative numbers in context;
- explain methods and reasoning about numbers orally and in writing.

Activity description

The pupils used negative numbers to play the spaceship game.

In the game, the spaceship lands on a planet where the temperature is currently 3ÚC. The spaceship cannot take off again until it falls to –10ÚC. Players take it in turns to choose cards and move up or down the board, according to the temperature shown on each card. The first person to reach –10ÚC wins.

Commentary
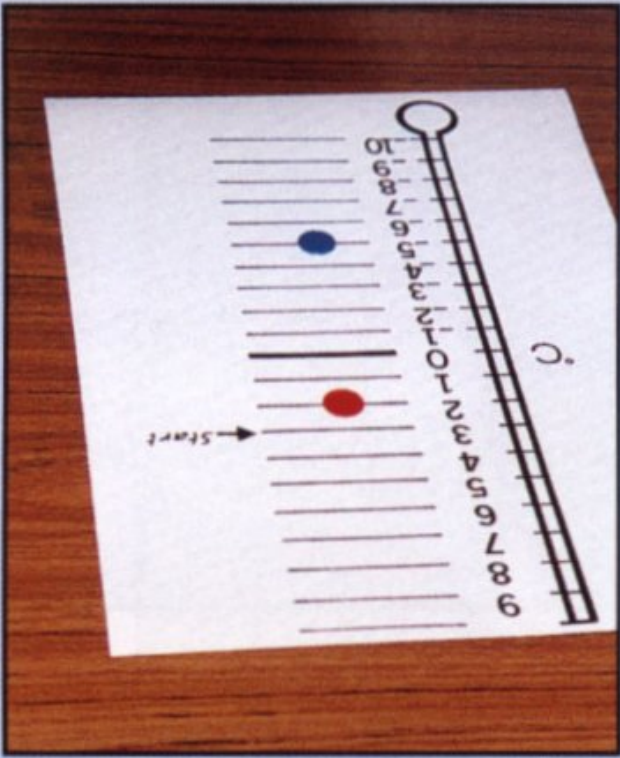
One context for work at level 3 with negative numbers includes recognising that negative numbers are below zero, for example that –2ÚC represents a temperature below freezing.

In one instance, where one counter was on 2 and the other on –5, Robert was able to explain that the difference was 7ÚC.

This is characteristic of performance at level 3.

Items of work

Robert explains his working for the spaceship game (1)

PUPIL:
You can take away from zero if you use minus numbers.

Robert explains his working for the spaceship game (2)

PUPIL:
The minus numbers are below freezing and the others are above freezing.

About this entry

Subject: mathematics

Year: 4

Key stage: 2

NC programme of study: Ma2p1i, Ma2p2c

Attainment target: Ma2

Evidence for: level 3