

Mathematics Activity Card

Level 2 (easily adaptable for other levels)

Essential Learning Area – Mathematics

Giving Directions

Equipment

- > Playground or spacious indoor area.

Achievement objectives

- > Describe and interpret position, using the language of direction and distance.
- > Make clockwise and anticlockwise turns.

Learning outcomes

- > Give and follow directions using 'clockwise', 'anticlockwise', 'left', and 'right'.

Suggested assessment

- > Students play 'Simon Says', incorporating instructions involving one, two, three and four quarter and half turns and directions, 'clockwise', 'anticlockwise', 'to the left', and 'to the right'.

Notes

- > For more examples of commands in Māori see www.sportnz.org.nz/ras.
- > This activity is based on *Mathematics in the New Zealand Curriculum*.

Teaching and learning

- > Model this activity first. Then have students work in groups, taking turns at giving directions.
- > Student gives directions like:
 - jump to your left
 - skip in an anticlockwise circle
 - spin around two times clockwise
 - do a cartwheel to the right (take care not to be too close to others)
 - make four quarter turns by hopping
 - peke ki te taha mau? (jump to the left)
 - peke ki te taha matau (jump to the right)
 - haere ki te taha matau (move to the right)
 - huri ki te taha mau (turn to the left).
- > When student has given four instructions someone else has a turn.

What to look for

- > Students describing and interpreting positions, using the language of direction and distance.
- > Students making clockwise and anticlockwise turns.
- > Students finding, by practical means, one half and one quarter of a shape, and half of a set of objects.
- > Students devising and following a set of instructions to carry out a mathematical activity.

What next?

- > Use the terms north-west, north-east, south-west and south-east as well as north, south, east and west.

Ways to adapt

- > Give directions for getting to places around the school. For example, from the classroom to the office, from the library to the medical room. Students work in pairs to do this and could write their directions first.
- > Students form a circle with rākau (sticks made of rolled-up magazines) standing in front of them and their finger on the top. On command – e.g. 'kei te taha mau' or 'kei te taha matau' – students let go of their rākau and grab the one to their left or right that their neighbour has left standing.
- > Students with really original ideas could give directions to others.