

### Learning objective

PNS: Understanding shape

- Follow and give instructions involving position, direction and movement.

### Resources



'Position and direction' Notebook file; photocopiable page 106 'Robot directions'; counters; pencils; simple maze marked out on floor (see Plenary).

### Links to other subjects

#### ICT

QCA Unit 2D 'Routes: controlling a floor turtle'

- Allow the children to program a floor turtle to travel through a simple maze.

#### Speaking and listening

Objective 14: To listen to others in class, ask relevant questions and follow instructions.

- The children must listen carefully to the instructions given to them by their partner in the Plenary.

### Whiteboard tools

Use the Eraser from the Pen tray to reveal the hidden instructions.



Pen tray



Select tool

# Moving along a route

## Starter

Take the children into a large space. Demonstrate what a quarter turn is and describe this as a right-angled turn. Show the children which way is clockwise and anti-clockwise. Ask them questions such as: *If you make three quarter turns clockwise and then two quarter turns anti-clockwise, which way will you be facing?*

Try out the instructions to test the children's answers.

## Whole-class shared work

- Open the 'Position and direction' Notebook file and use page 6 to introduce the commands needed to make a rabbit move around the screen. Invite the children to come and move the rabbit on the grid in the various directions. Explain that they are not completing the maze at this stage.
- Ensure that all the children are confident in their use of left and right.
- Go to page 7 and give the children a few minutes to describe, to a partner, the route the rabbit will need to take to the end of the maze. Point out the key words: *up, down, left* and *right*. Write the first instruction in the first box, *Up 6*, to get the discussion started. Invite the children to write the subsequent instructions in the boxes provided.
- Once they have done this, use the Eraser from the Pen tray to rub over the blue boxes to reveal the hidden instructions.
- Invite a volunteer to come to the whiteboard to move the rabbit according to the instructions.
- Move on to page 8, with a ladybird on a grid. This ladybird moves in a different way to the rabbit. Instead of moving forwards and sideways to go round corners, this ladybird needs to turn on the spot and travel in the direction that it is facing. It can only make quarter turns. Invite the children to move and turn the ladybird.
- Look at page 9 and work as a class to determine the route that the ladybird will need to take to the end of the maze. Invite the children to drag and drop the required instructions and then to move the ladybird.

## Independent work

- Give each child a copy of photocopiable page 106 and a counter.
- Ask each child to find a route for the robot (counter) through the maze and draw it with a pencil.
- Ask the children to write the instructions that the robot must follow on the lines beneath the maze.
- Support less confident learners by scribing their directions for them or allowing them to record their directions orally using a tape recorder.
- Challenge more confident learners by giving them a robot that can only move forward and make quarter turns. Draw an arrow on the counter to support the children in recalling in which direction the robot is travelling. Suggest that they move the counter along the route as they write their instructions.

## Plenary

- Mark out a simple maze on the playground or hall floor.
- Put the children in pairs and assign one child in each pair as the robot and the other as the controller. Blindfold the robot and ask the controller to lead the robot through the simple route by giving clear directional instructions. Ensure that there are no tripping hazards nearby.
- Make an assessment of each child's ability to give and understand instructions during this activity.