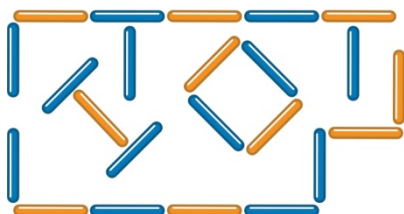
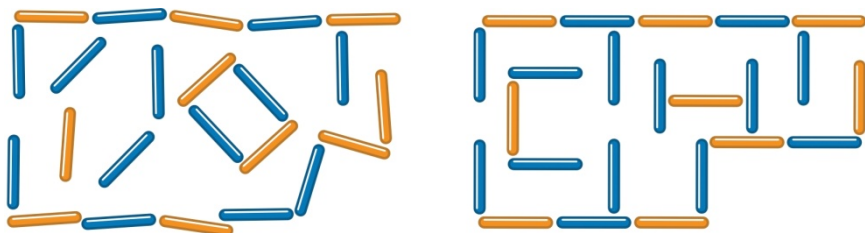




2 Obstacle Course

The challenge is to guide an object through the grid using directional language.



Students take turns to give instructions to move an object through the obstacle course, which can be made using straws, blocks or masking tape.

Options

- Conduct this activity in an open/outdoor space such as a school hall using equipment such as witches hats, chalk grids.
- Have students design their own obstacle course.
- Create an obstacle course that requires the follower to take a 45° turn.
- Use half turns and quarter turns.
- Use compass directions, for example North, South, East and West.
- Use compass points, for example North East, North West, South East, and South West.
- Use combinations of key terms.
- Race to an object or locate an object.
- If the obstacle course were a mini golf hole, how many shots would be needed to get through the course? (This number would be 'par' for the hole. 'Par' is the pre-determined number of shots a golfer should require to complete a hole.)
- Imagine that the obstacle course was on a billiard table. Is it possible to hit a billiard ball through the obstacle course with one shot?

Considerations

- Help the students make connections between the different terms used. For example, when rotating an object, a 'quarter turn left' might be expressed as 'a 90° turn anticlockwise' or 'a shift from facing North to West'.

Key Questions

- What is the least number of instructions needed to get through?
- Can diagonal moves help to plot a more efficient path?
- If the obstacle course were a mini-golf hole, what would 'par' be?

LANGUAGE

- guide, follower, between, near, next to, forward, toward, stop, go
- quarter turn, half turn, left, right
- clockwise, anti-clockwise
- compass: North, North East, East, South East, South, South West, West, North West
- angles: 90 degrees, 180 degrees
- paces, metres, centimetres
- coordinates, diagonal, navigate

CONCEPTS

- location
- direction
- rotation
- orientation
- degree
- distance
- informal unit
- angle

CURRICULUM LINKS

- [Key Ideas](#) -The proficiency strands are understanding, fluency, problem-solving and reasoning. They describe how content is explored or developed; that is, the thinking and doing of mathematics.
- Describe position and movement (ACMMG010)
- Give and follow directions to familiar locations (ACMMG023)
- Identify and describe half and quarter turns (ACMMG046)
- Identify angles as measures of turn and compare angle sizes in everyday situations (ACMMG064)
- Use a grid reference system to describe locations (ACMMG113)
- Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies (ACMMG142).