



# Activity Card 5

## Build a Square

- In this activity, you are asked to investigate and build squares. You can use a Bee-Bot first if you have one and the Logo screen turtle.
- Find a square tile or a square shape marked on the floor to remind you what it looks like.
- Use only the commands **forward 50** then **right 90**. Can you draw a square? How many times do you think you will have to use the commands?
- Can you repeat the activity, only this time use the command **left 90** instead of **right 90**?
- What have you noticed? Can you write a sentence to describe what you see? Could you explain what has happened?
- The **repeat** command is a useful one. It will save you having to write out long lines of similar commands.
- Clear your screen by typing **cs**. Now type this command:

**repeat 4[forward 50 right 90]**

Can you see the square? Now type this command:

**repeat 4[right 90 forward 50]**

Before you type the commands, can you explain how they are different and predict what you think will happen and what will be drawn?

- This time, use the same **repeat** command and change the direction from **right** to **left**. Before you type the commands, can you predict what you think will happen? Could you draw a diagram to show what you think will happen and how your four shapes will be positioned?
- Finally, use the **cs** command to clear your screen. You have now learned a lot about squares and how to draw them using four direction and four movement commands. Instead of four **right** or four **left** commands, do you think it is possible to use two **right** and two **left** commands? Could you investigate this and give an explanation? You could draw out some of the shapes you think might be drawn.