

Activity Card 11

Hansel and Gretel

- Gretel has to look after her little brother Hansel because he has difficulty remembering which direction is left and which is right. He always gets them confused.
- One day, he sets off in his Bee-Bot and gets lost. Fortunately, Gretel has found his list of commands and knows where he might be.
- Can you read the commands, decide what Hansel has typed in and then help Gretel write the commands to find him?

forward 30

right 90

forward 30

right 90

forward 30

left 90

forward 30



- This time, Hansel is really lost because Gretel does not know in what order Hansel has used the commands. She only knows that he has used:

2 **right 90** turns

1 **left 90** turn

4 **forward 60** commands

Use a sheet of squared paper and investigate all the possible positions where Hansel might be. You will have to try all the combinations of the different orders in which he may have used the commands.

- Can you draw all Hansel's possible locations using Logo?
- At the end of each command to return the turtle to the start without leaving a line, using the **home** command.
- Can you help Gretel to write the commands to reach and rescue Hansel from every position where he might be?