Ready-to-go Lesson Slides Year 2

Position and direction

Lesson 3

Sum1

At Third Space Learning we provide personalised online lessons from specialist maths tutors to support the target groups in your school.

These ready-to-go slides are designed to work alongside our interventions to supplement quality first teaching and raise attainment in maths for all pupils.

To find out more about how you could use our 1-to-1 interventions year-round to boost maths progress in your school then get in touch:

020 3771 0095
hello@thirdspacelearning.com

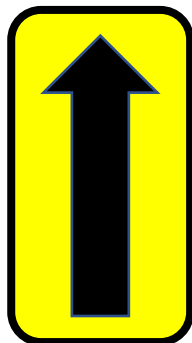**Boosting maths progress through 1-to-1 conversations…**

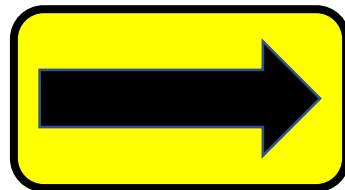**THIRD SPACE** LEARNING

To describe movement and turns

❑ I can describe and record directions
❑ I know that it is important to be clear about the direction an object is facing before I turn it
❑ I can apply what I know about movement and turns using ICT or during PE

Starter: Darcey and Bishan are looking at the turn of an arrow

from this ⬆️ to this ➡️ .

Who is right? Why?

I think the arrow has turned a three-quarter turn anti-clockwise.
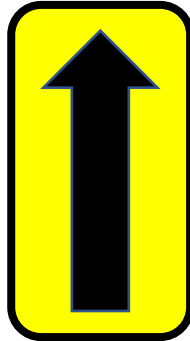
I think the arrow has turned a quarter turn clockwise.

To describe movement and turns

❑ I can describe and record directions
❑ I know that it is important to be clear about the direction an object is facing before I turn it
❑ I can apply what I know about movement and turns using ICT or during PE

Starter: Darcey and Bishan are looking at the turn of an arrow

from this   to this   .

Both Bishan and Darcey could be right as both descriptions leave the second arrow in the same place.

Who is right? Why?
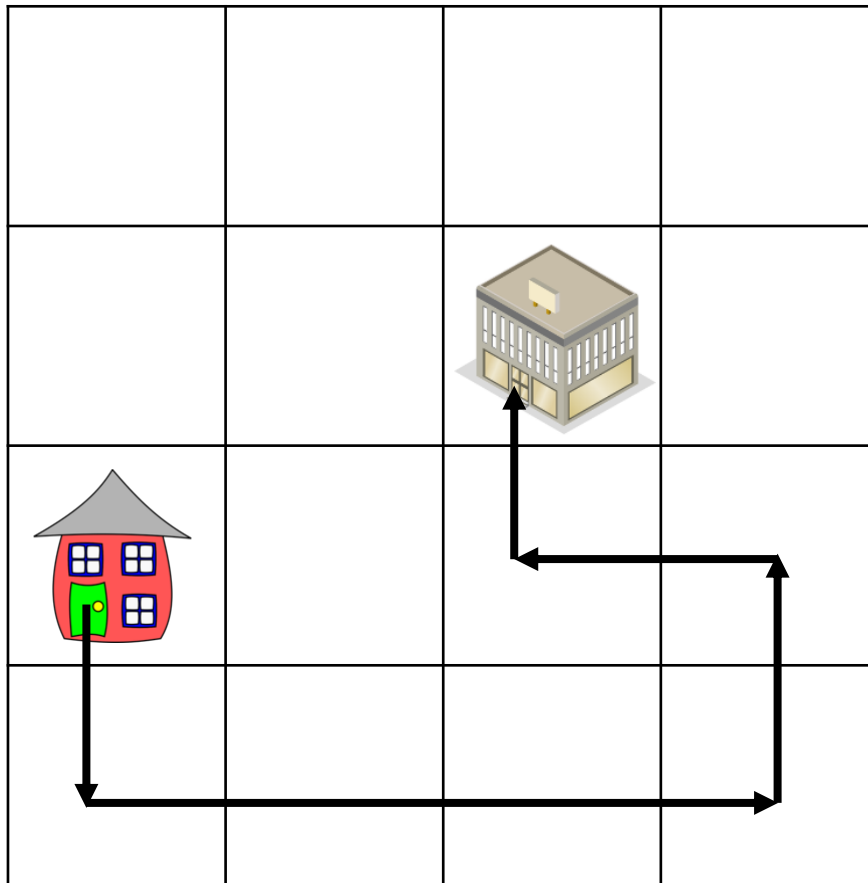
I think the arrow has turned a three-quarter turn anti-clockwise.

I think the arrow has turned a quarter turn clockwise.

To describe movement and turns

Talking Time: Can you describe the route that Alfie takes from home to school?
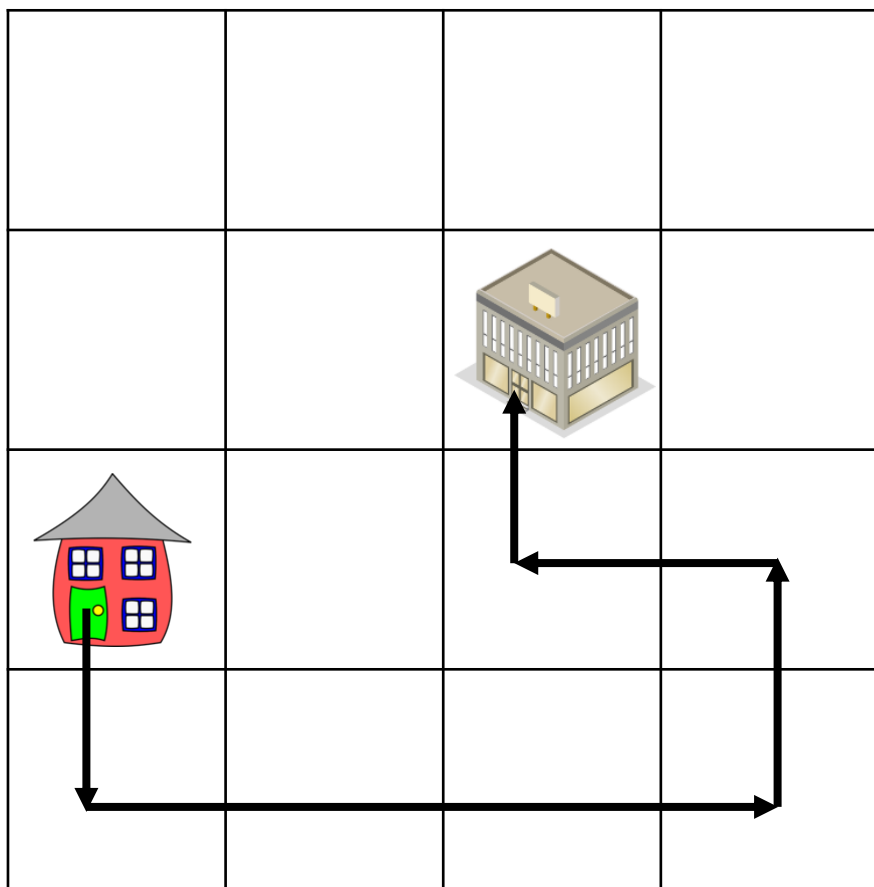The first two have been done for you.

Forwards 1 square.

Quarter turn anti-clockwise.

To describe movement and turns

Talking Time: Can you describe the route that Alfie takes from home to school?
The first two have been done for you.

Forwards 1 square.

Quarter turn anti-clockwise.

Forwards 3 squares.

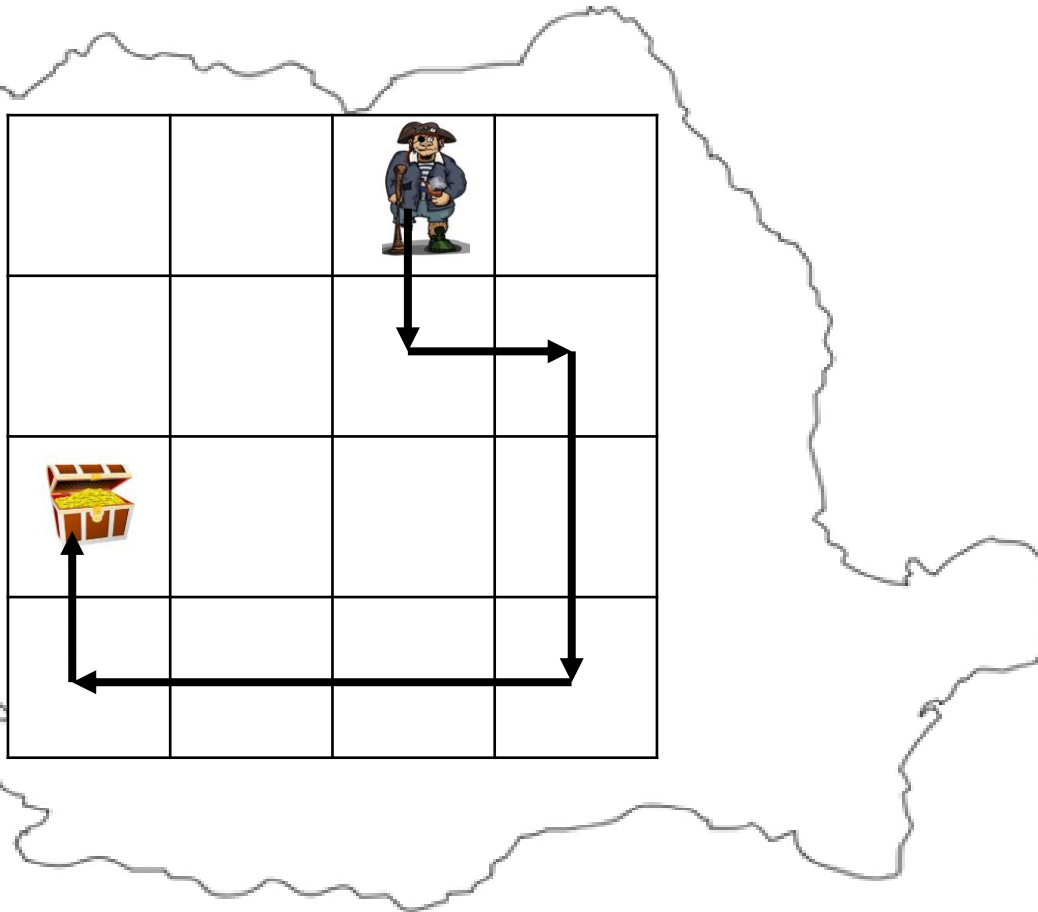Turn left.

Forwards 1 square.

Quarter turn anti-clockwise.

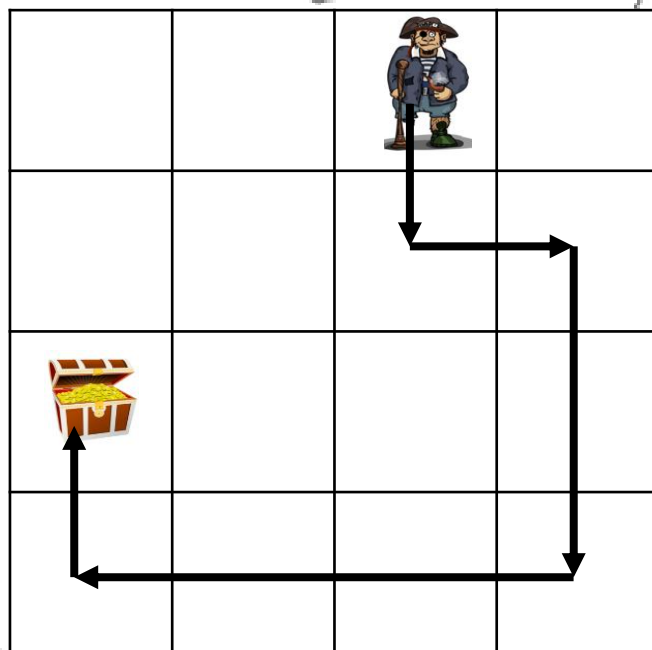Forwards 1 square.

Turn right.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you describe the route that the pirate takes to the treasure, using forwards, left and right directions?

To describe movement and turns

Talking Time: Can you describe the route that the pirate takes to the treasure, using forwards, left and right directions?
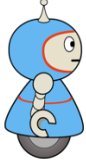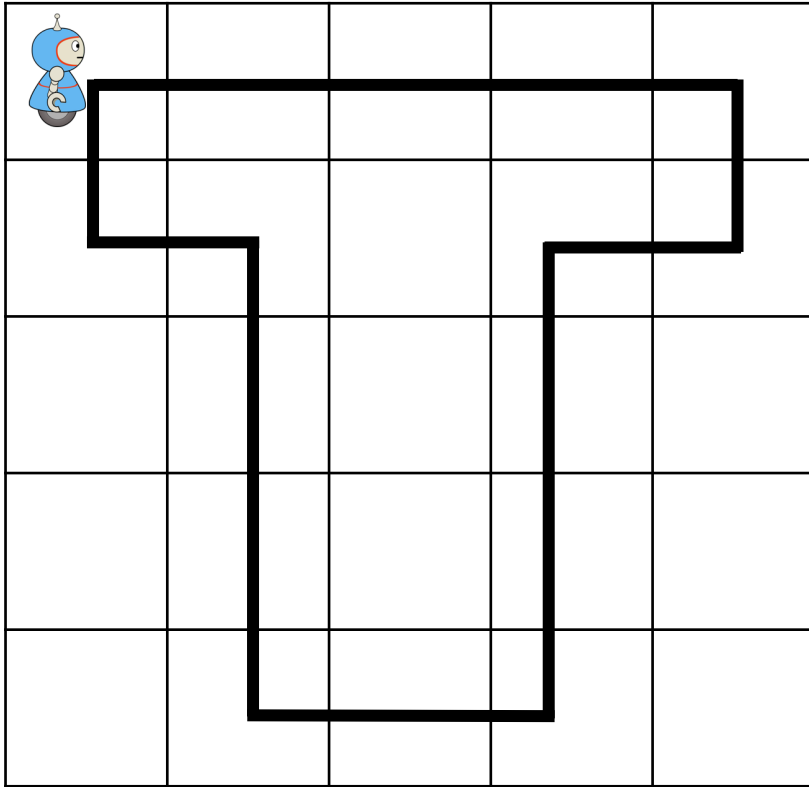
Extension:
Can you rewrite the directions using clockwise and anti-clockwise turns instead of right and left?

Forwards 1 square.
Turn left.
Forwards 1 square.
Turn right.
Forwards 2 squares.
Turn right.
Forwards 3 squares.
Turn right.
Forwards 1 square.

To describe movement and turns

Activity 1: A robot has drawn this shape on the grid of squares.
Can you describe the route that the robot took to draw the shape?

Try to use mix of left and right with clockwise and anti-clockwise turns.

To describe movement and turns

Activity 1: A robot has drawn this shape on the grid of squares.
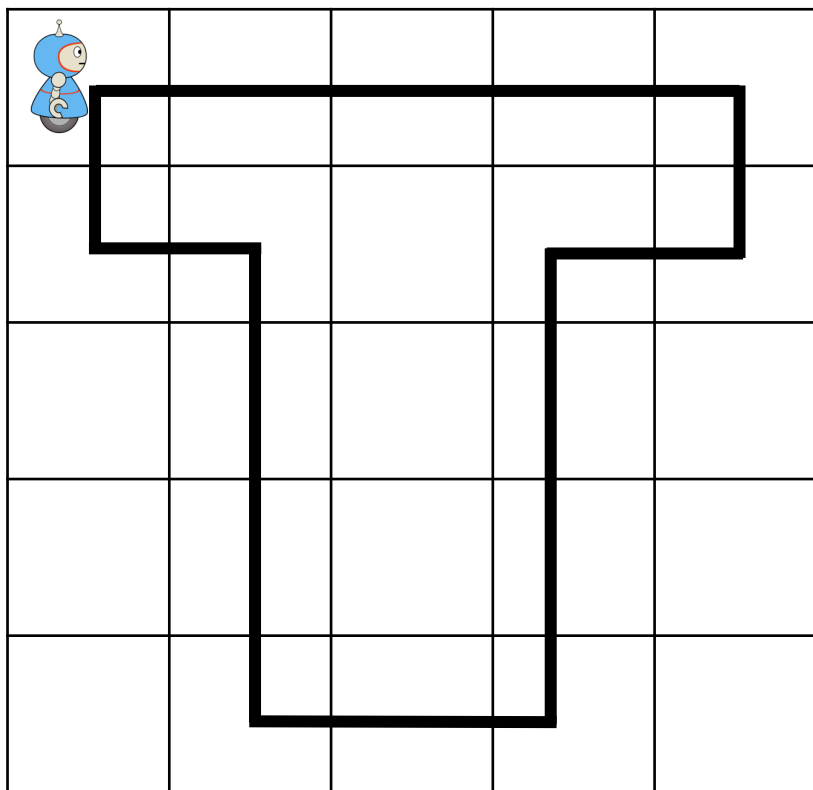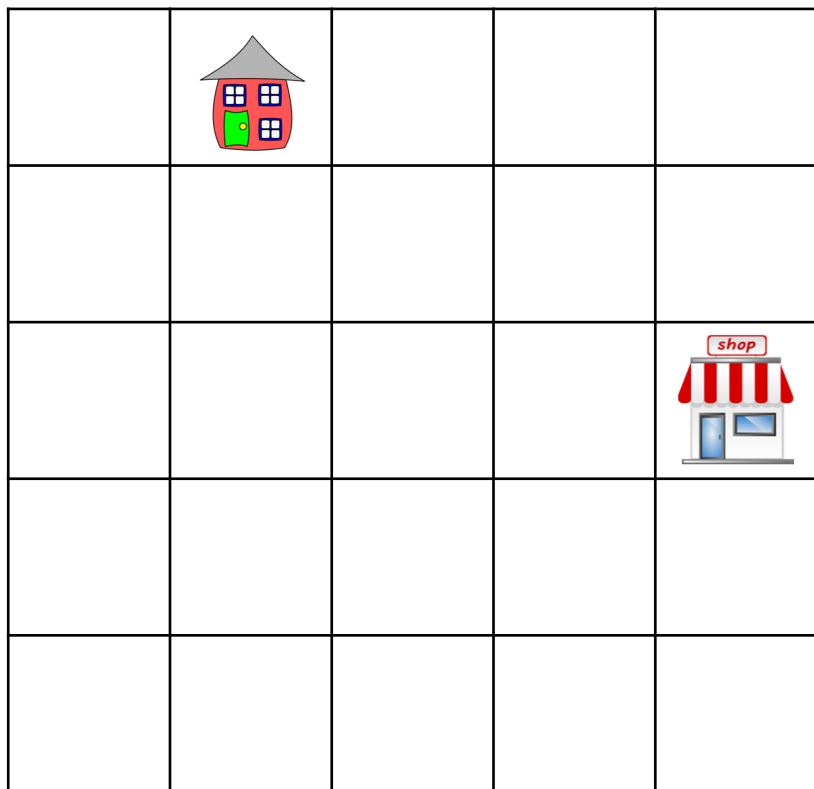Can you describe the route that the robot took to draw the shape?

Forwards 4 squares.
Turn right.
Forwards 1 square.
A quarter turn clockwise.
Forwards 1 square.
Turn left.
Forwards 3 squares.
Turn right.
Forwards 2 squares.
A quarter turn clockwise.
Forwards 3.
A quarter turn anti-clockwise.
Forwards 1.
Turn right.
Forwards 1.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of the house to the front door of the shop?

Forwards 4 squares.
Turn left.

Forwards 1 square.
Quarter turn anti-clockwise.

Forwards 1 square.
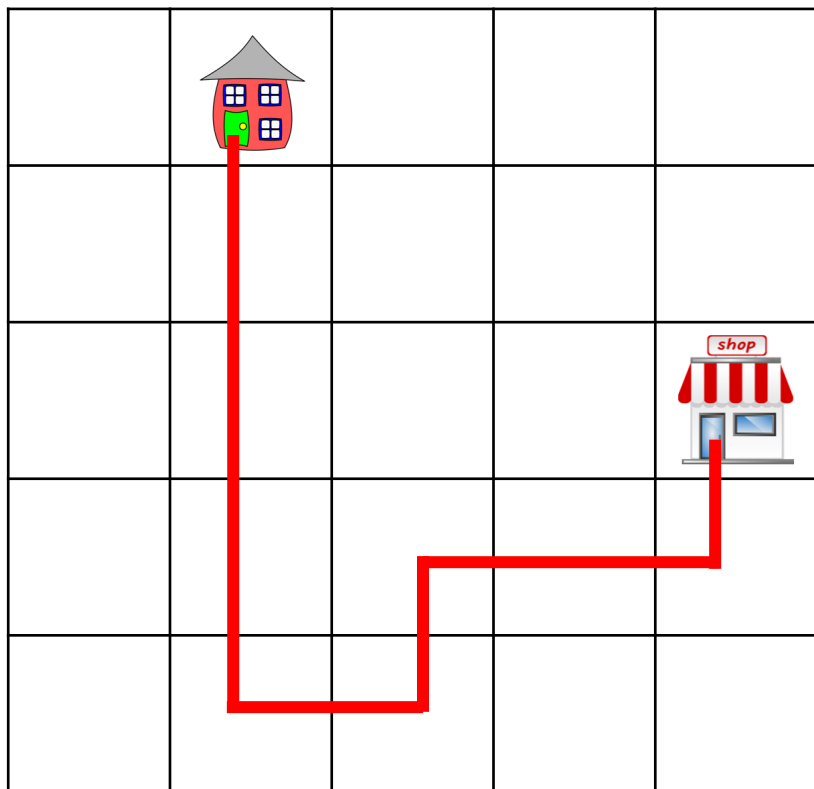Make a three-quarter turn anti-clockwise.

Forwards 2 squares.
Turn left.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of the house to the front door of the shop?

Forwards 4 squares.
Turn left.

Forwards 1 square.
Quarter turn anti-clockwise.

Forwards 1 square.
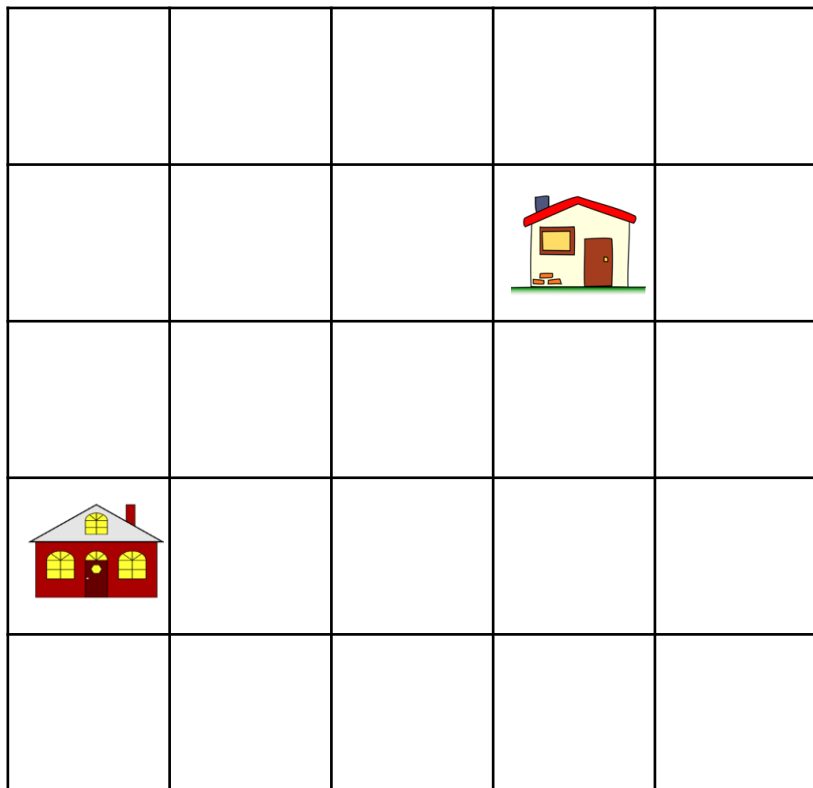Make a three-quarter turn anti-clockwise.

Forwards 2 squares.
Turn left.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of Jenson's house to the front door of friend Freddie's house?

Forwards 1 square.
Quarter turn anti-clockwise.

Forwards 1 square.
Turn left.

Forwards 2 squares.
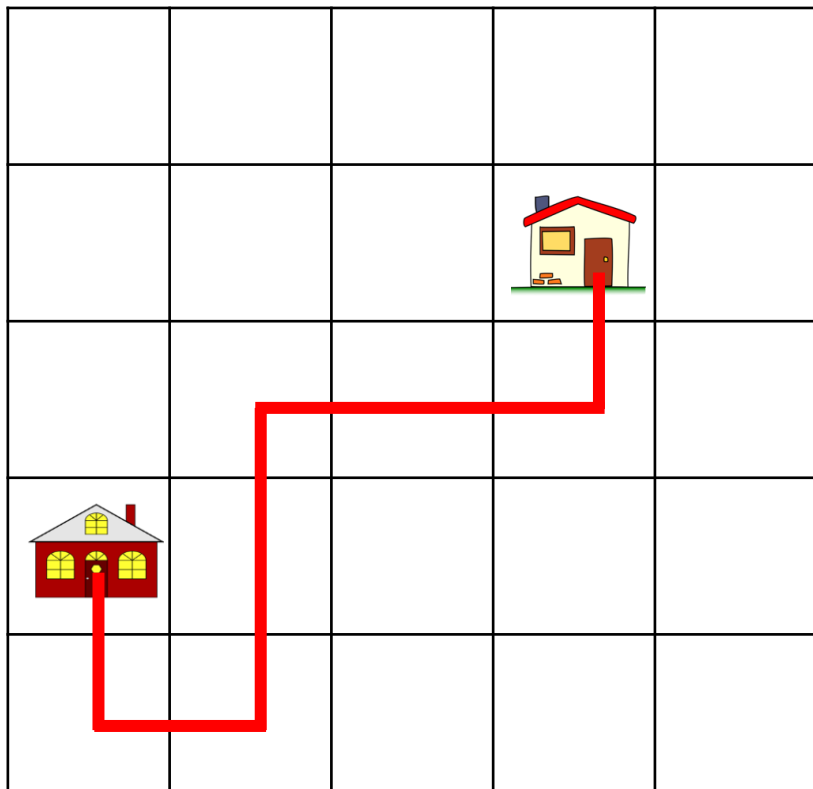Make a three-quarter turn anti-clockwise.

Forwards 2 squares.
Make a three-quarter turn clockwise.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of Jenson's house to the front door of friend Freddie's house?

Forwards 1 square.
Quarter turn anti-clockwise.

Forwards 1 square.
Turn left.

Forwards 2 squares.
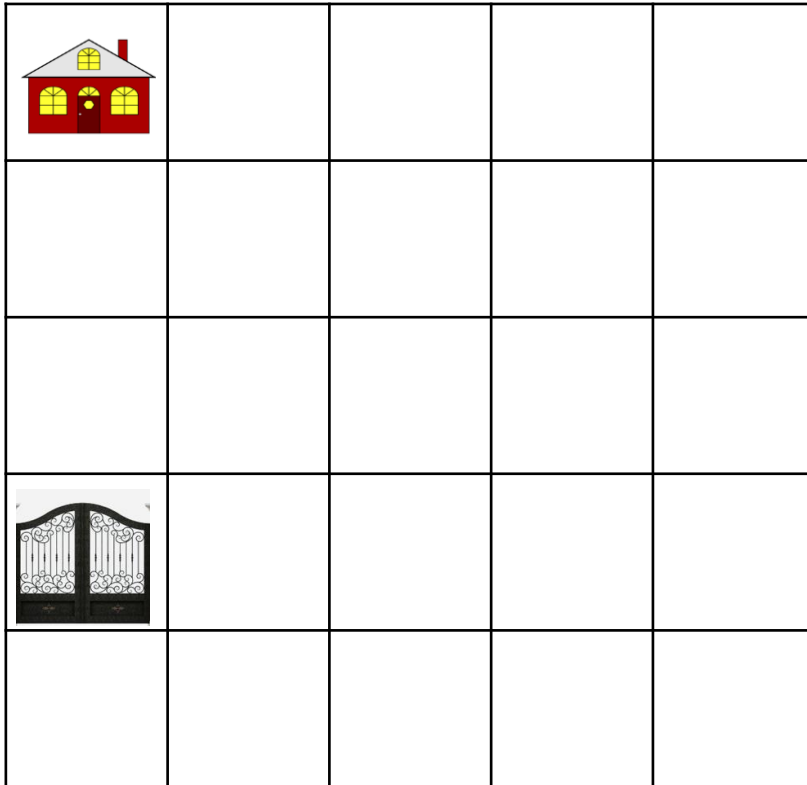Make a three-quarter turn anti-clockwise.

Forwards 2 squares.
Make a three-quarter turn clockwise.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of Jenson's house to the front gates of the park?

Forwards 1 square.
Turn left.

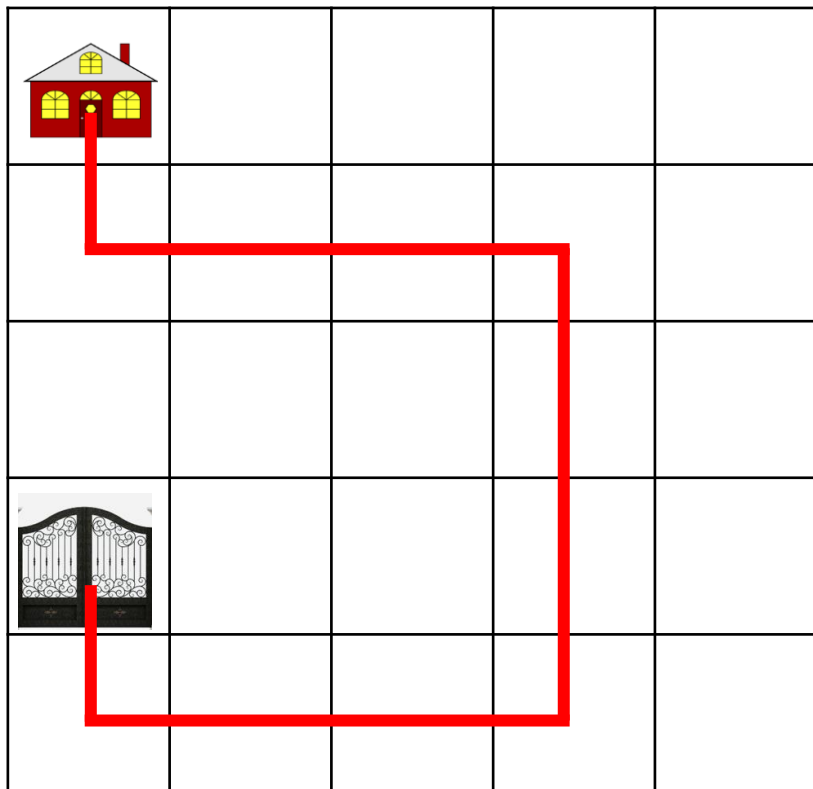Forwards 3 squares.
Make a quarter turn clockwise.

Forwards 3 squares.
Turn right.

Forwards 3 squares.
Make a quarter turn clockwise.

Forwards 1 square.

To describe movement and turns

Talking Time: Can you use the directions to draw the route from the front door of Jenson's house to the front gates of the park?

Forwards 1 square.
Turn left.

Forwards 3 squares.
Make a quarter turn clockwise.

Forwards 3 squares.
Turn right.

Forwards 3 squares.
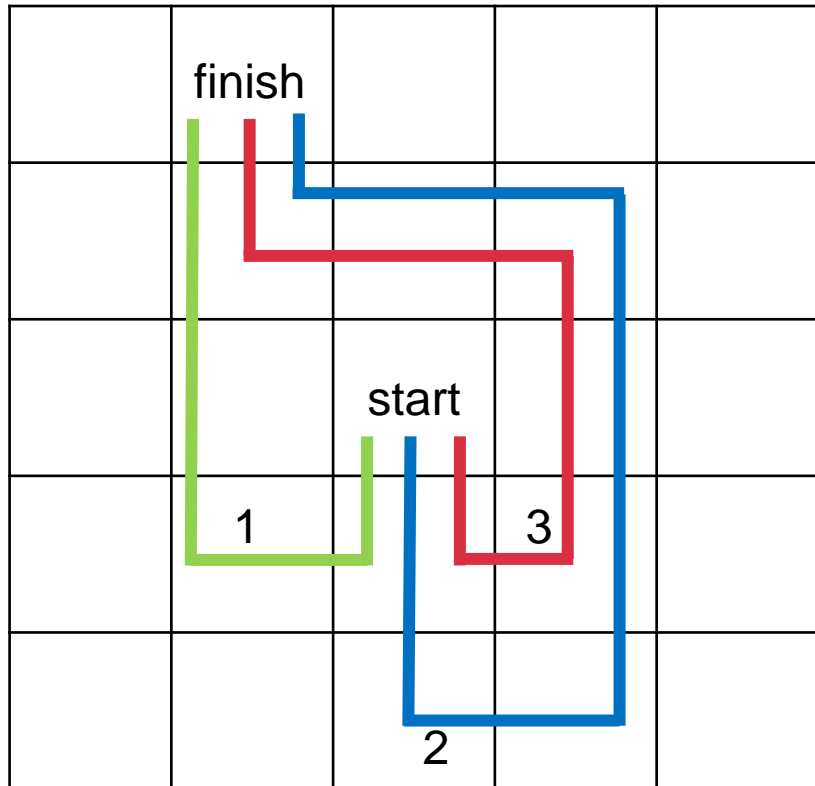Make a quarter turn clockwise.

Forwards 1 square.

To describe movement and turns

Activity 2: True or false?

These three routes are the ONLY ways to get from the start square to the finish square. Do you agree?

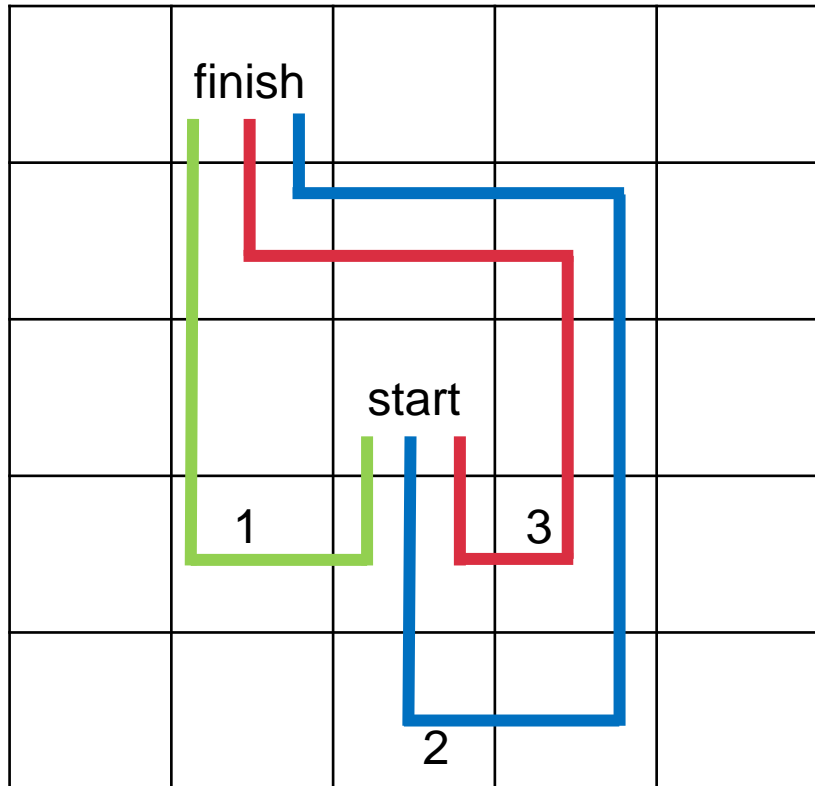Can you describe the three routes using direction and turn vocabulary?

To describe movement and turns

Activity 2: True or false?

These three routes are the ONLY ways to get from the start square to the finish square. Do you agree? False. There are lots of different routes.

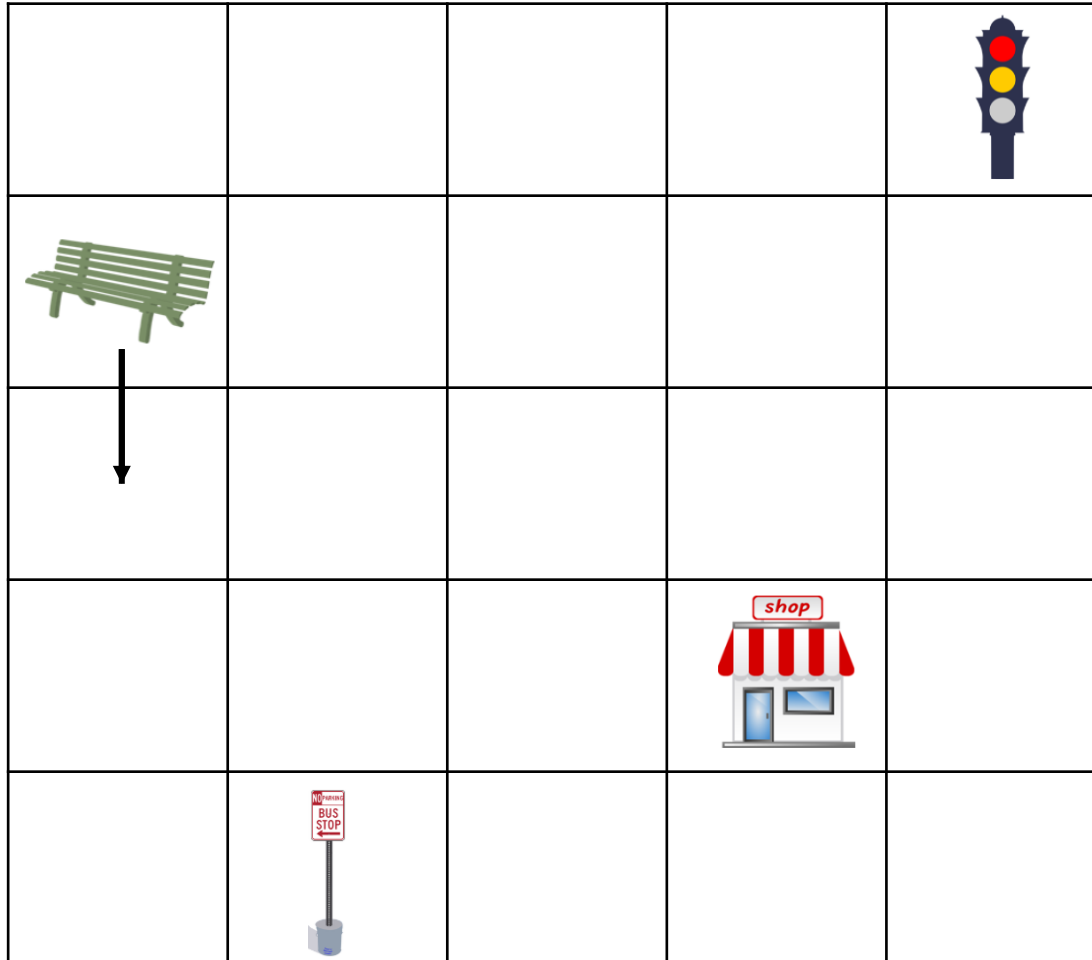Can you describe the three routes using direction and turn vocabulary?

1. Forwards 1 square. Make a quarter turn clockwise. Forwards 1 square. Make a quarter turn clockwise. Forwards 3 squares.

2. Forwards 2 squares. Make a quarter turn anti-clockwise. Forwards 1 square. Make a three-quarter turn clockwise. Forwards 3 squares. Make a quarter turn anti-clockwise. Forwards 2 squares. Make a quarter turn clockwise. Forwards 1 square.

3. Forwards 1 square. Make a quarter turn anti-clockwise. Forwards 1 square. Make a quarter turn anti-clockwise. Forwards 2 squares. Make a quarter turn anti-clockwise. Forwards 2 squares. Make a three-quarter turn anti-clockwise. Forwards 1 square.

To describe movement and turns

Talking Time: Can you give Alfie some directions to walk from the **park bench** to the **front door of the shop**?
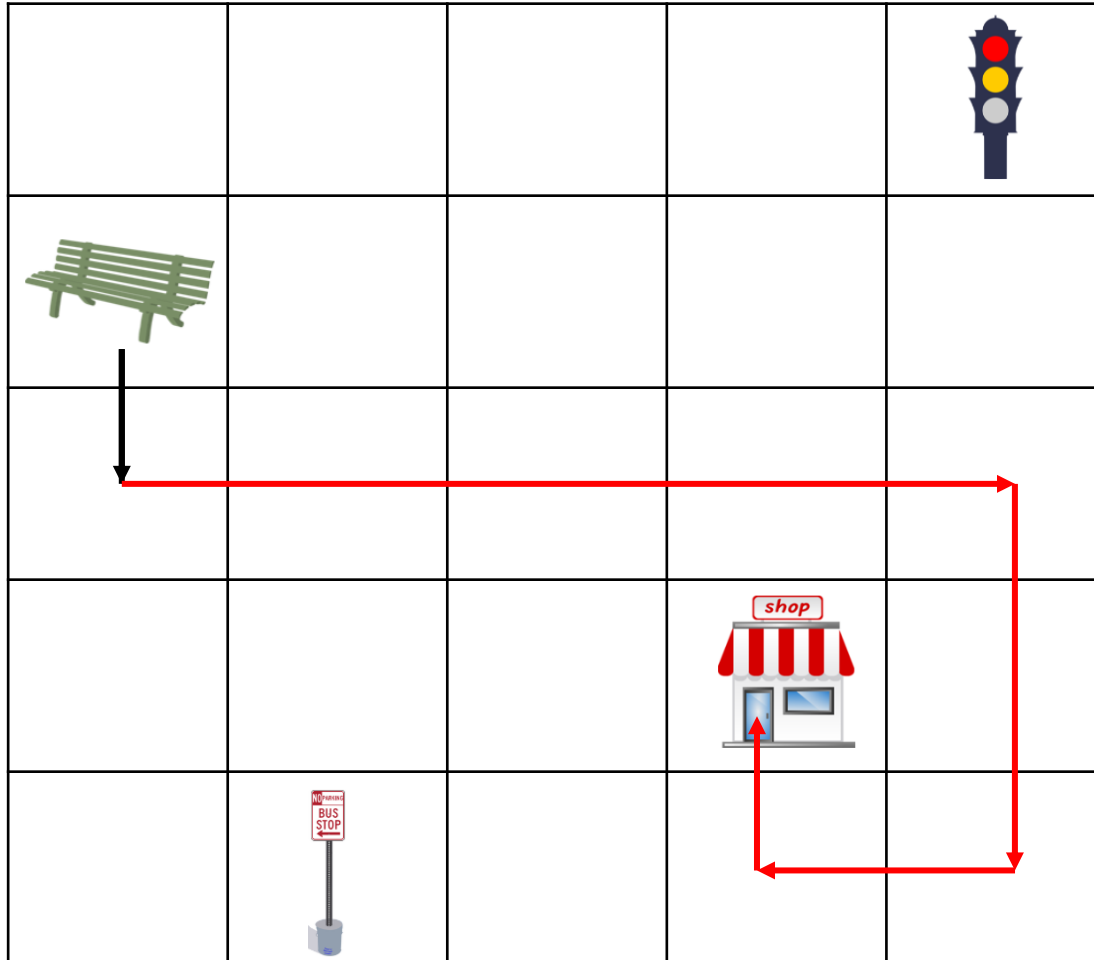

Extension:
Is there more than one answer to this question?
Can you investigate different answers?

To describe movement and turns

Talking Time: Can you give Alfie some directions to walk from the **park bench** to the **front door of the shop**?

Forwards 1 square.
Make a three-quarter turn clockwise.
Forwards 4 squares.
Make a quarter turn clockwise.
Forwards 2 squares.
Make a three-quarter turn anti-clockwise.
Forwards 1 square.
Make a quarter turn clockwise.
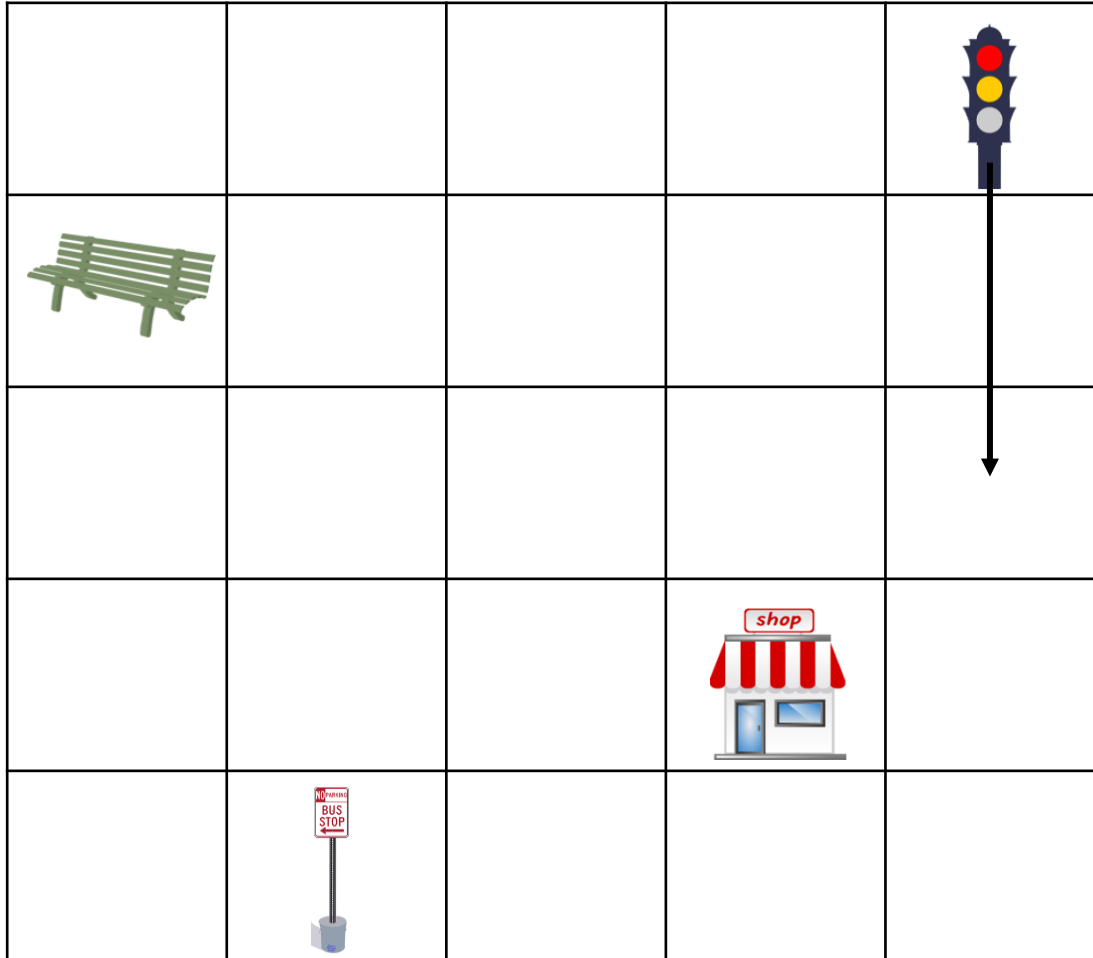Forwards 1 square.

Extension:
Is there more than one answer to this question?
Can you investigate different ways?

To describe movement and turns

Talking Time: Can you give Alfie some directions to walk from the **traffic lights** to the **bus stop**?
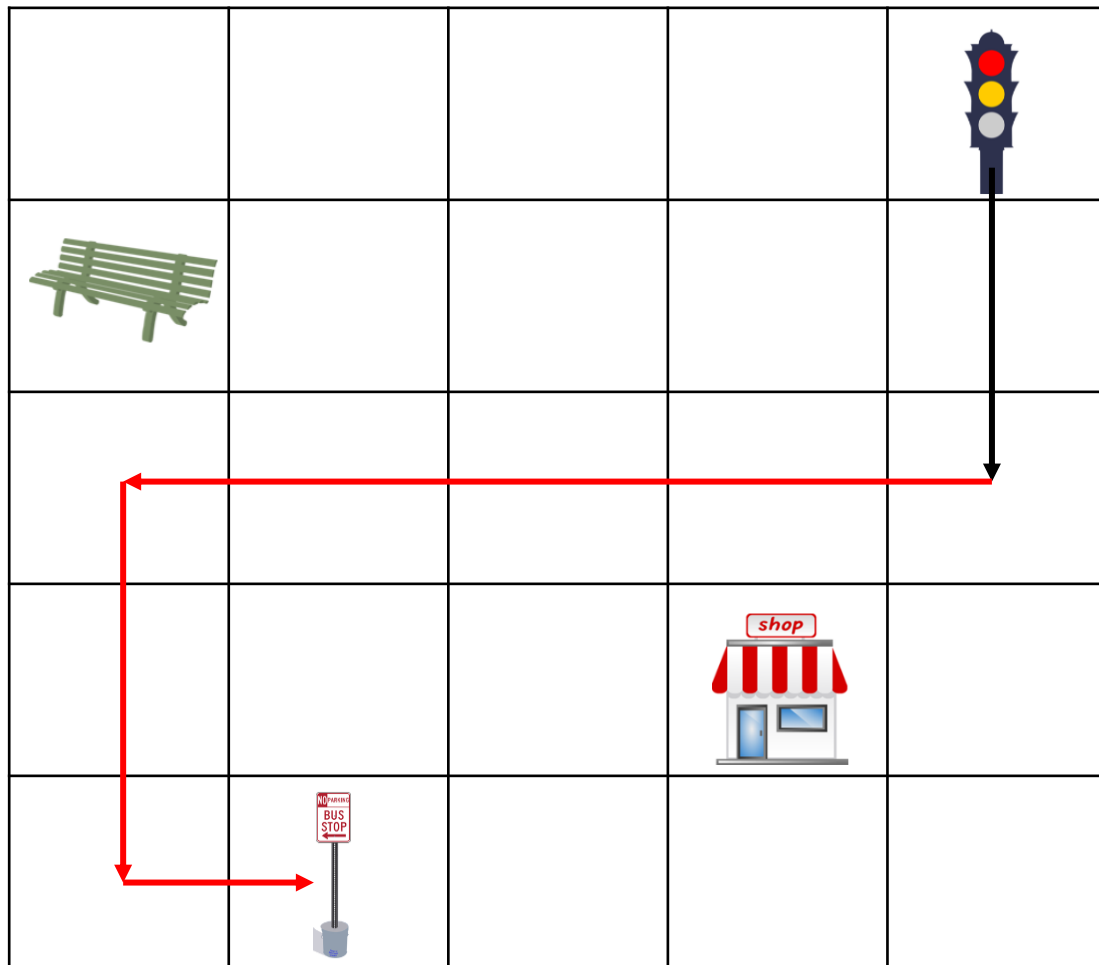
Extension:
Is there a more efficient route from the traffic lights to the bus stop where you will need fewer directions?
Investigate!

To describe movement and turns

Talking Time: Can you give Alfie some directions to walk from the **traffic lights** to the **bus stop**?
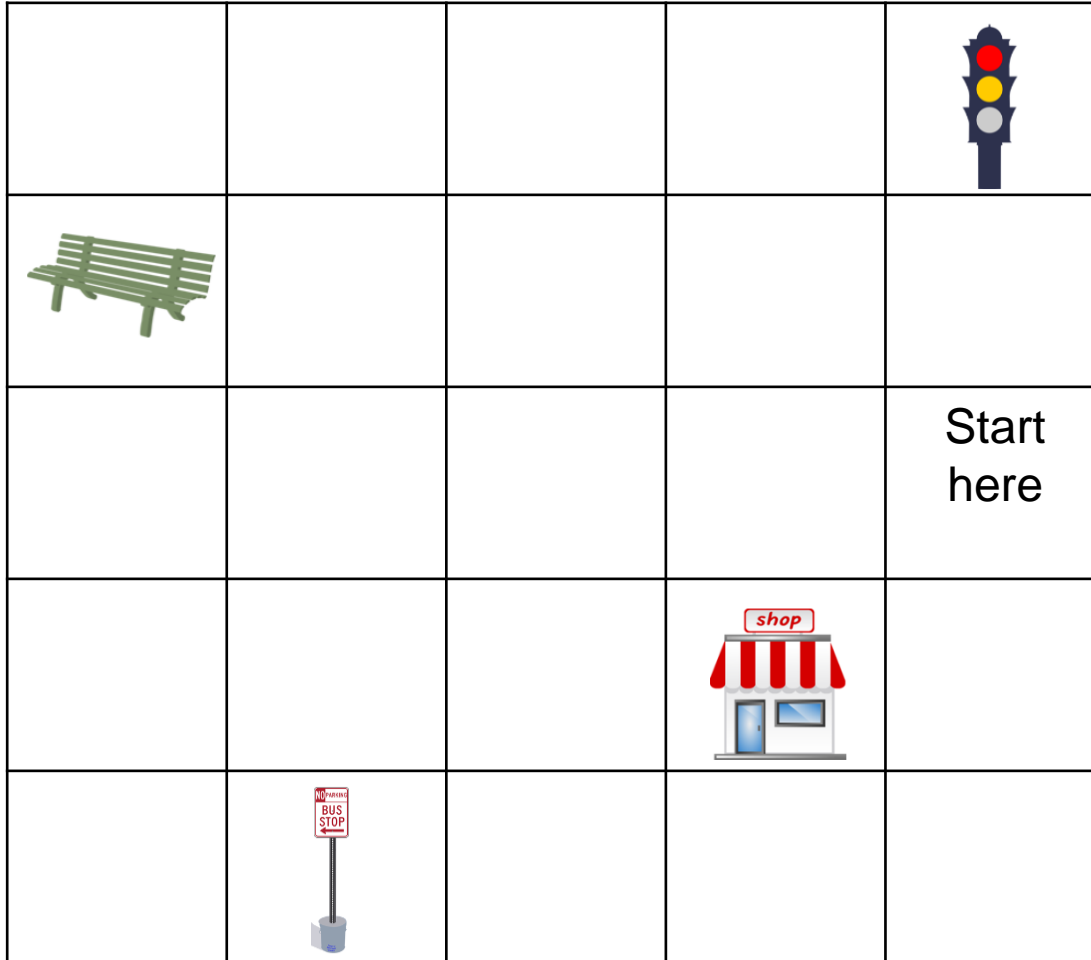
Forwards 2 squares.
Make a quarter turn clockwise.
Forwards 4 squares.
Make a quarter turn
anti-clockwise.
Forwards 2 squares.
Make a three-quarter turn
clockwise.
Forwards 1 square.

Extension:
Is there a more efficient route from the traffic lights to the bus stop where you will need fewer directions?
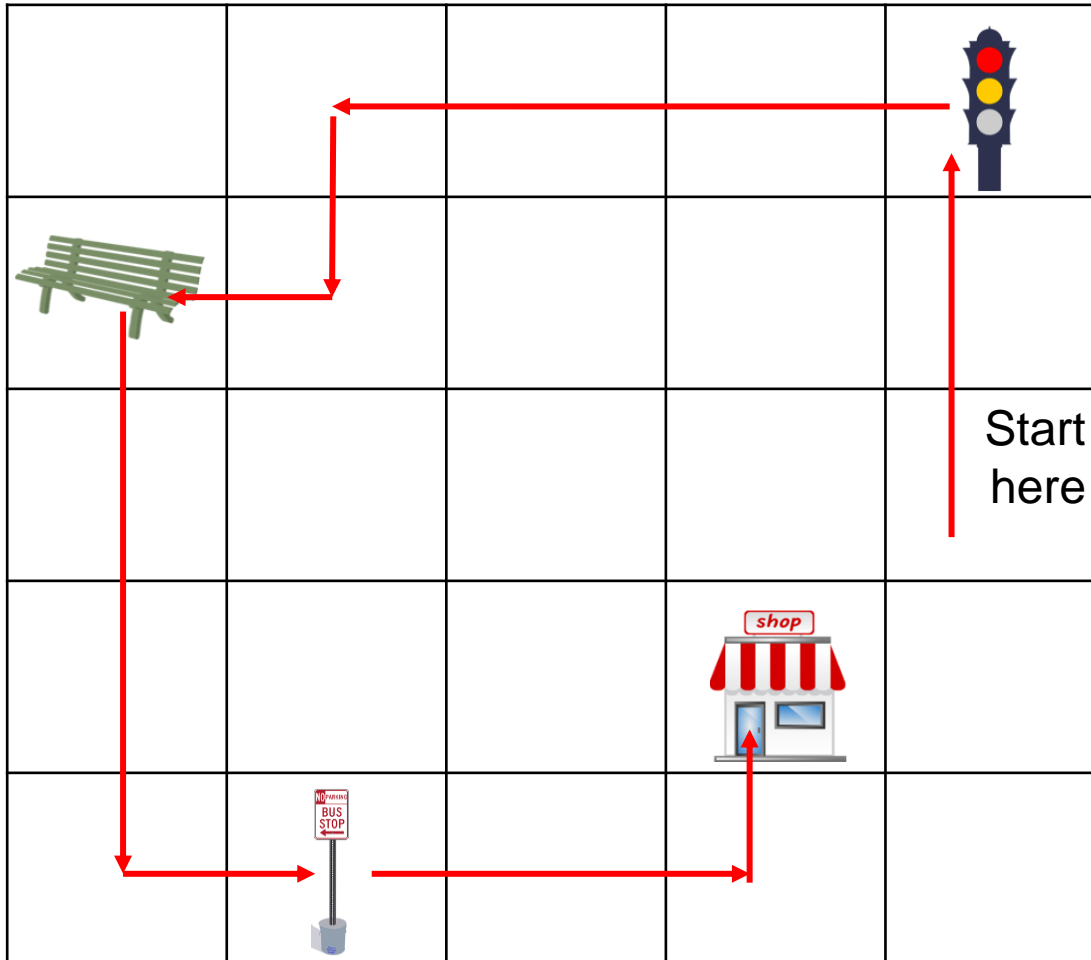Investigate!

To describe movement and turns

Talking Time: Can you give Alfie some directions to visit **all four places** on the grid?

To describe movement and turns

Talking Time: Can you give Alfie some directions to visit **all four places** on the grid?

Forwards 2 squares.
Make a quarter turn anti-clockwise.
Forwards 3 squares.
Make a quarter turn anti-clockwise.
Forwards 1 square.
Make a three-quarter turn anti-clockwise.
Forwards 1 square.
Make a three-quarter turn clockwise.
Forwards 3 squares.
Make a quarter turn anti-clockwise.
Forwards 1 square.
Forwards 2 squares.
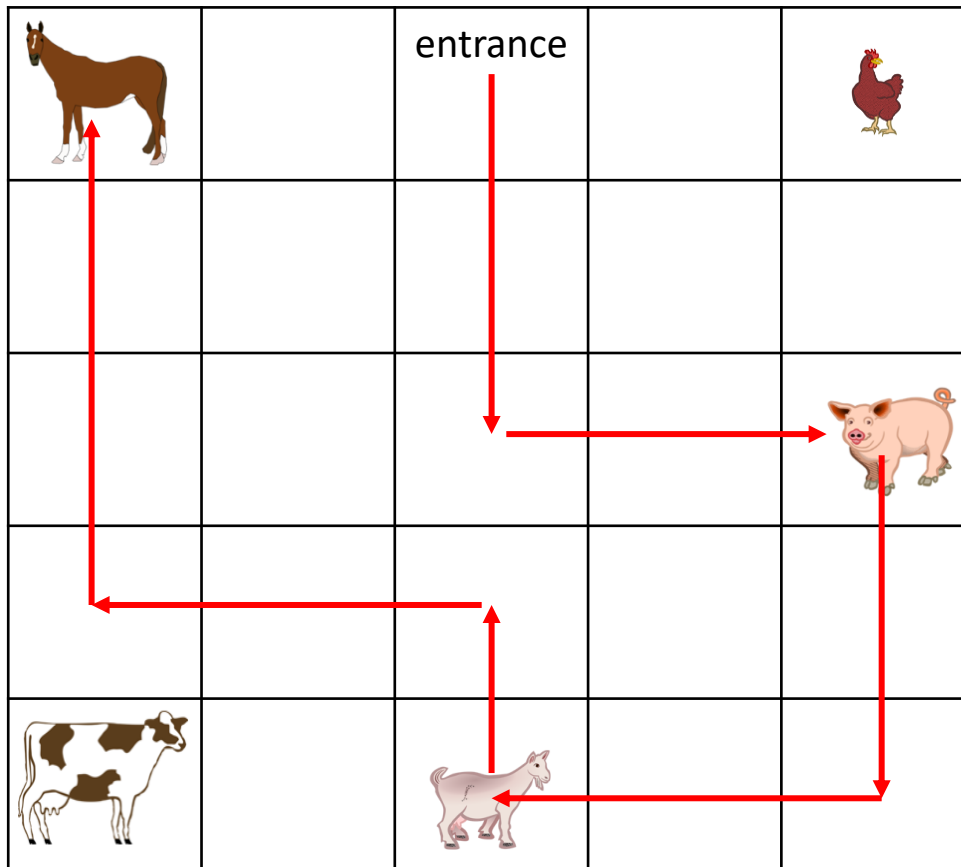Make a three-quarter turn clockwise.
Forwards 1 square.

Start here

To describe movement and turns

Activity 3: The children in the Reception class are going on a farm visit.
The teachers want them to see the **pigs**, the **goats** and the **horses**.
Can you write directions to help them visit all these animals?

To describe movement and turns

Activity 3: The children in the Reception class are going on a farm visit.
The teachers want them to see the **pigs**, the **goats** and the **horses**.
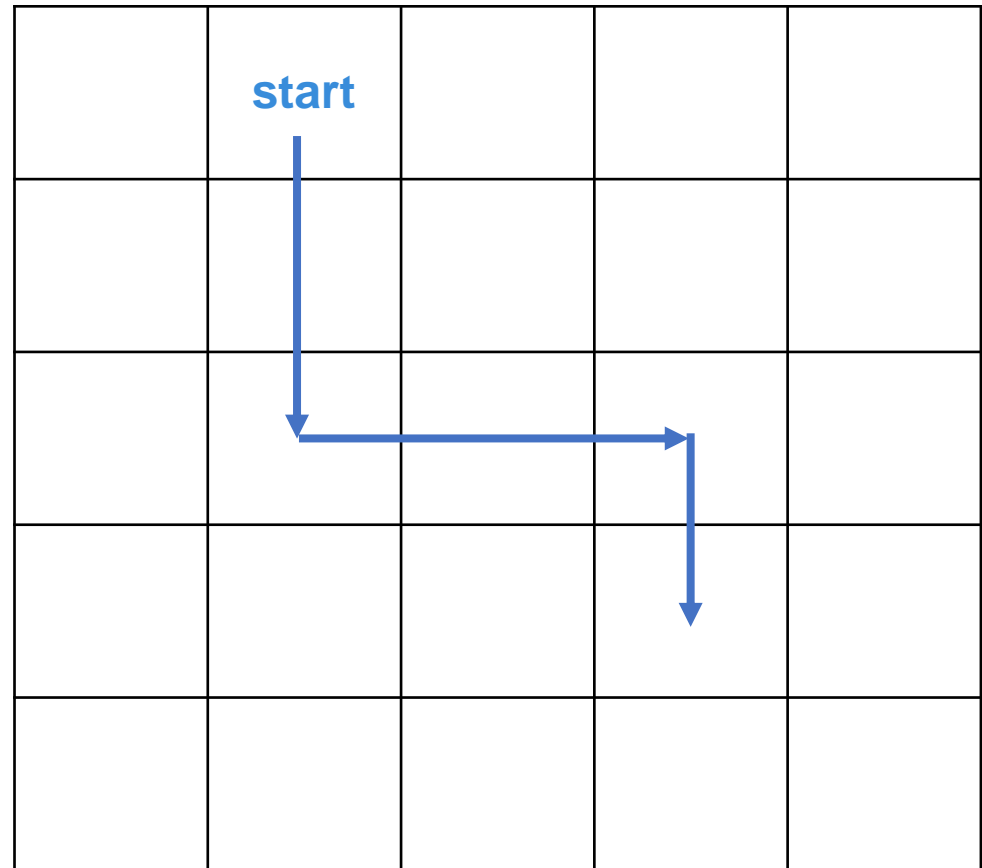Can you write directions to help them visit all these animals?

Forwards 2 squares.
Make a quarter turn anti-clockwise.
Forwards 2 squares.
Make a quarter turn clockwise.
Forwards 2 squares.
Make a three-quarter turn anti-clockwise.
Forwards 2 squares.
Make a quarter turn clockwise.
Forwards 1 square.
Make a quarter turn anti-clockwise.
Forwards 2 squares.
Make a quarter turn clockwise.
Forwards 3 squares.

To describe movement and turns

❏ I can describe and record directions
❏ I know that it is important to be clear about the direction an object is facing before I turn it
❏ I can apply what I know about movement and turns using ICT or during PE

Evaluation:

Can you give Alfie some directions to get back to the start?

start

To describe movement and turns

- ❑ I can describe and record directions
- ❑ I know that it is important to be clear about the direction an object is facing before I turn it
- ❑ I can apply what I know about movement and turns using ICT or during PE

Evaluation:

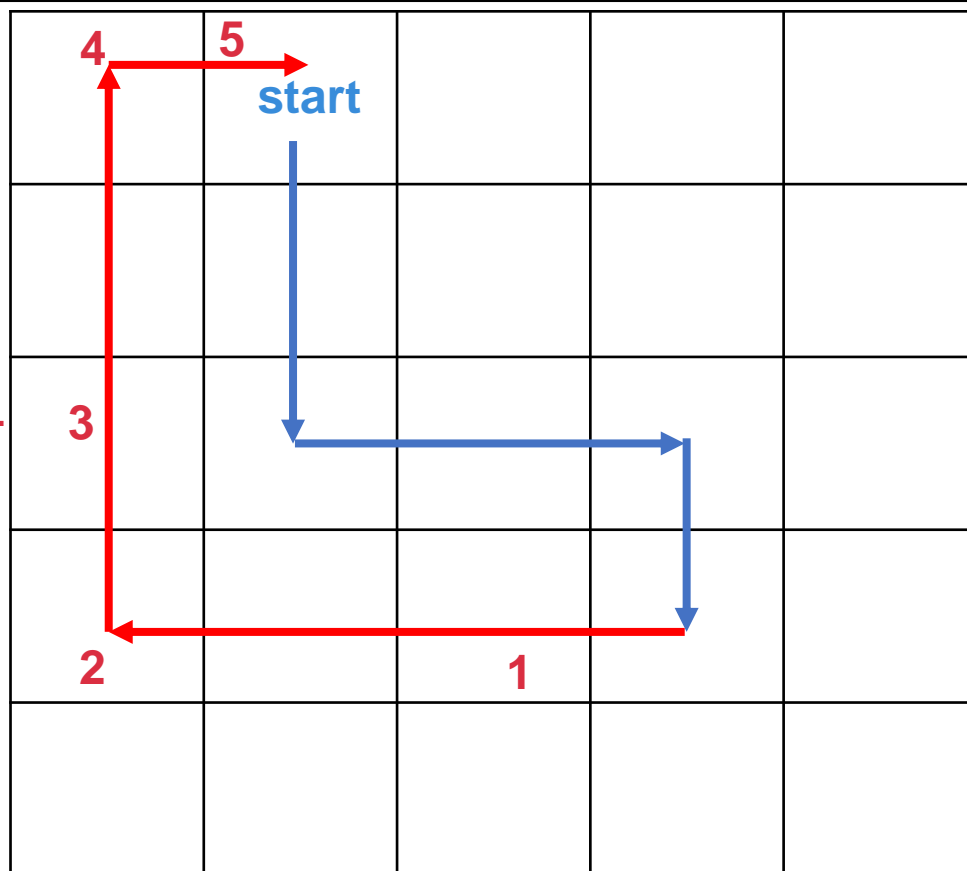**Can you give Alfie some directions to get back to the start?**

Forwards 3 squares.

Make a three-quarter turn anti-clockwise.

Forwards 3 squares.

Make a quarter turn clockwise.

Forwards 1 square.

Do you have a group of pupils who need a boost in maths this term?

Each pupil could receive a personalised lesson every week from our specialist 1-to-1 maths tutors.

- Raise attainment
- Plug any gaps or misconceptions
- Boost confidence

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