

Reasoning and Problem Solving – Describing Movement

National Curriculum Objectives:

Mathematics Year 2: (2P2) [Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns \(clockwise and anticlockwise\)](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Two shapes are given on a grid. Explain why a sentence describing their location to each other is correct or incorrect.

Expected Two objects facing a direction are on a grid. Explain why a sentence describing a one-step route between them is correct or incorrect.

Greater Depth Two objects facing a direction are on a grid. Explain why a sentence describing a two-step route between them is correct or incorrect.

Questions 2, 5 and 8 (Reasoning)

Developing Write a statement describing how one creature must move to get to an object on a grid.

Expected Write statements describing how two creatures must move to get to an object on a grid (one-step movements).

Greater Depth Write statements describing how two creatures must move to get to an object on a grid (two-step movements).

Questions 3, 6 and 9 (Problem Solving)

Developing Given one-step directions, locate hidden treasure on a grid.

Expected Given two-step directions, locate hidden treasure on a grid.

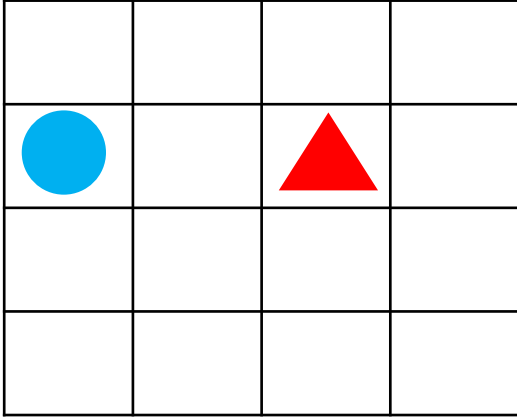
Greater Depth Given three-step directions, locate hidden treasure on a grid.

More [Year 2 Position and Direction](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Describing Movement

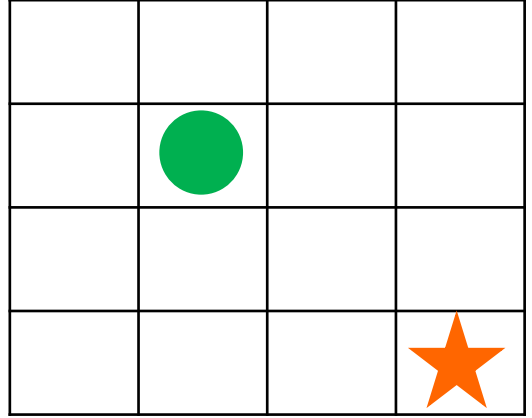
1a. Jose thinks the circle is two squares to the right of the triangle. Is he correct? Explain why or why not.



R

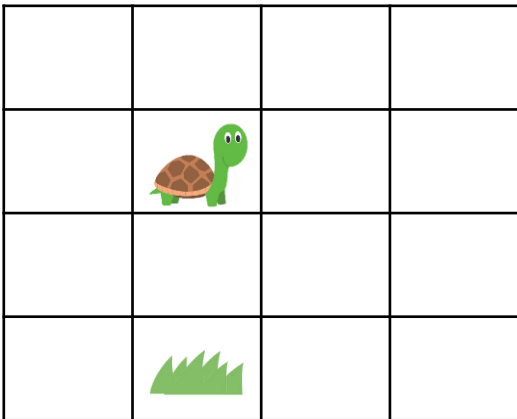
Describing Movement

1b. Rhea thinks the star is two squares up and two squares left from the circle. Is she correct? Explain why or why not.



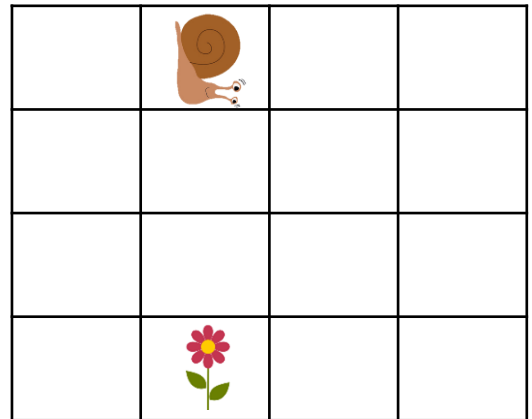
R

2a. Write a statement using forwards, backwards, left or right describing how the creature can get to the grass.



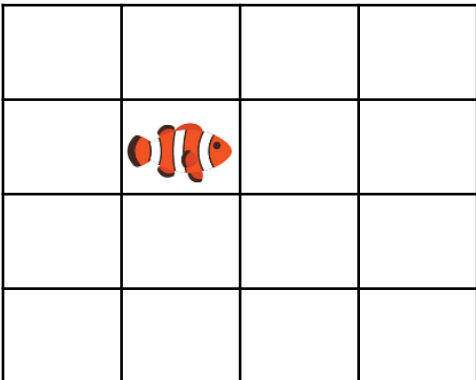
R

2b. Write a statement using forwards, backwards, left or right describing how the creature can get to the flower.



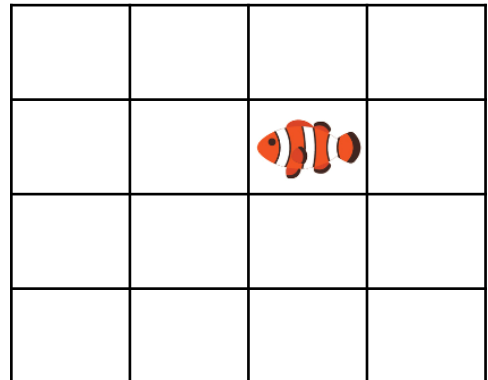
R

3a. The treasure is buried 2 squares to the right of the fish. Where is the treasure buried?



PS

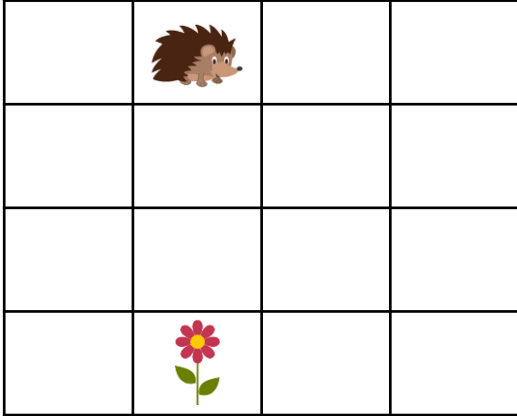
3b. The treasure is buried 2 squares forward from the fish. Where is the treasure buried?



PS

Describing Movement

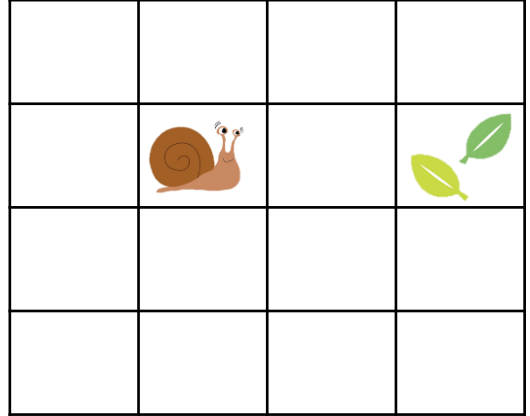
4a. Kyle thinks if the hedgehog moves 3 squares down, it will find the flower. Is he correct? Explain why or why not.



R

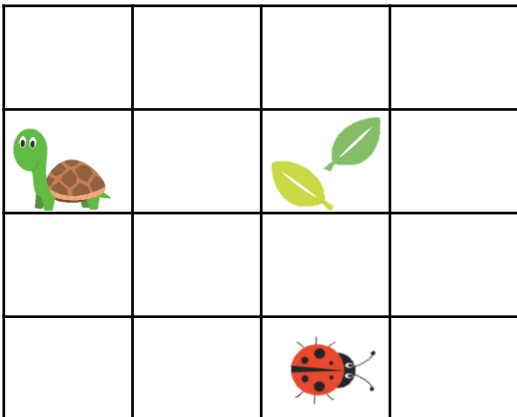
Describing Movement

4b. Genie thinks that if the snail moves 2 squares right, it will find the grass. Is she correct? Explain why or why not.



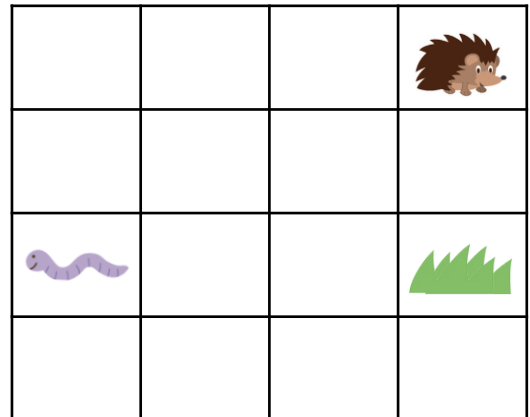
R

5a. Write statements using forwards, backwards, left and right describing how each creature can get to the leaves.



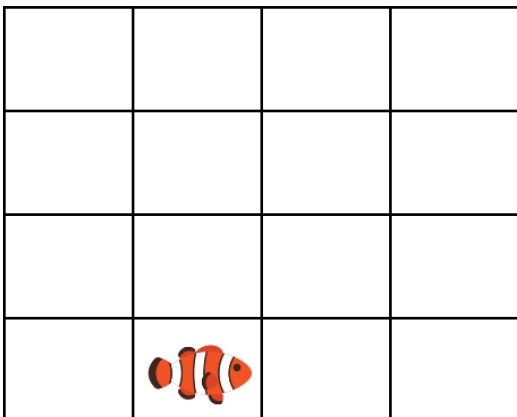
R

5b. Write statements using forwards, backwards, left and right describing how each creature can get to the grass.



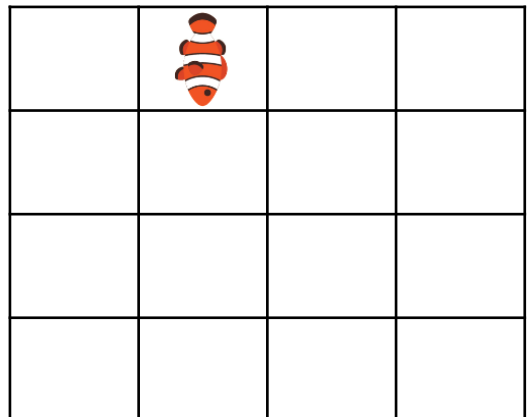
R

6a. The treasure is buried 1 square forward and 2 squares left of the fish. Where is the treasure buried?



PS

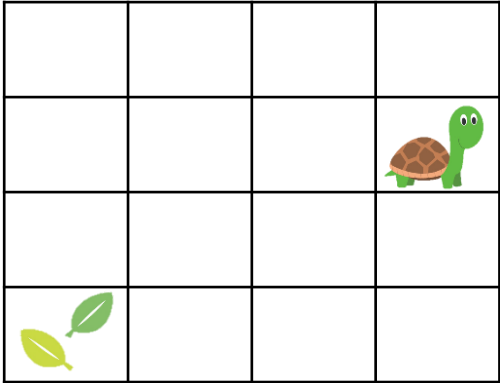
6b. The treasure is buried 3 squares forward and 2 squares left of the fish. Where is the treasure buried?



PS

Describing Movement

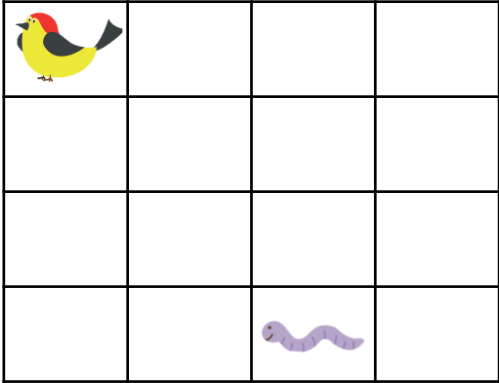
7a. Joy thinks if the turtle moves 2 squares down and 3 squares left, it will find the leaves. Is she correct? Explain why or why not.



R

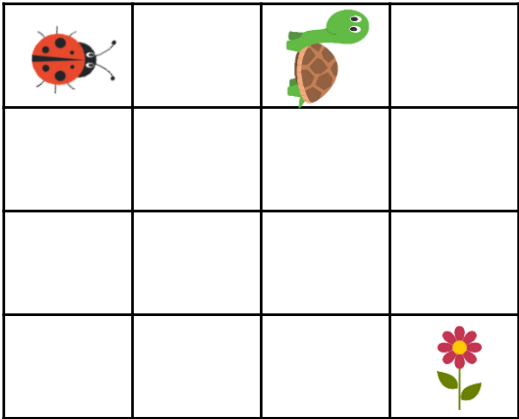
Describing Movement

7b. Paulo thinks that if the bird moves 2 squares right and 3 squares down, it will find the worm. Is he correct? Explain why or why not.



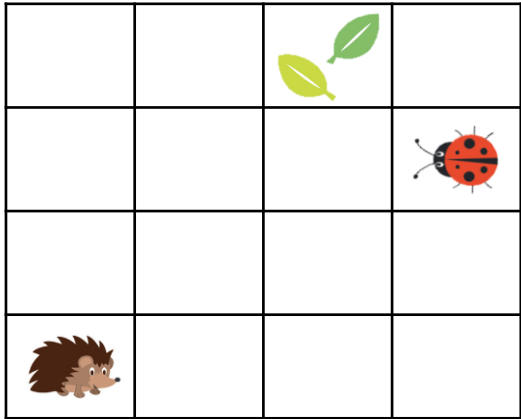
R

8a. Write statements using forwards, backwards, left and right describing how each creature can get to the flower.



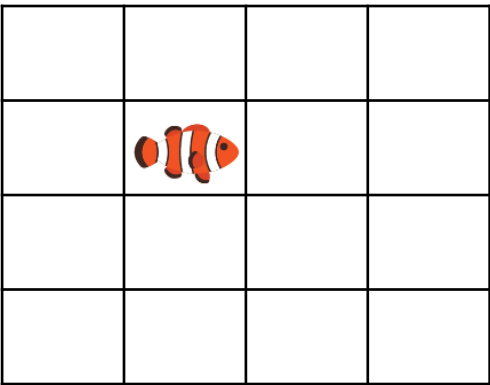
R

8b. Write statements using forwards, backwards, left and right describing how each creature can get to the leaves.



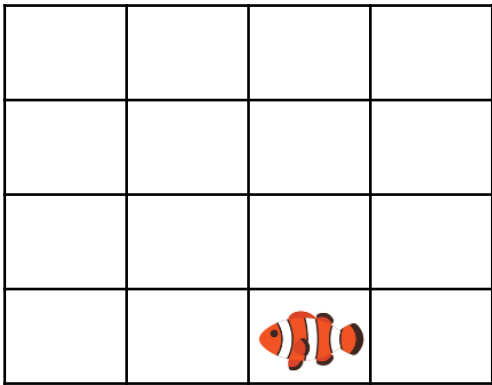
R

9a. The treasure is buried 1 square forward, 2 squares right and 1 square backward of the fish. Where is the treasure buried?



PS

9b. The treasure is buried 3 squares right, 2 squares forward and 1 square left from the fish. Where is the treasure buried?



PS

Reasoning and Problem Solving

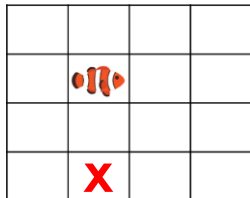
Describing Movement

Developing

1a. Jose is incorrect. The circle is two squares to the left of the triangle.

2a. The turtle can move two squares right.

3a.

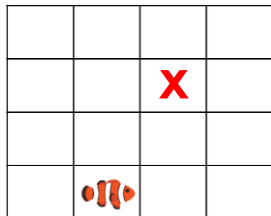


Expected

4a. Kyle is incorrect. The hedgehog should move three squares right to find the flower.

5a. Various answers, for example: The turtle can move two squares backward. The ladybird can move two squares left.

6a.

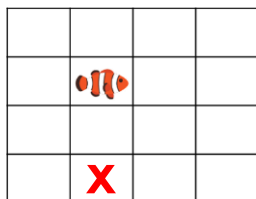


Greater Depth

7a. Joy is incorrect. The turtle should move two squares right and three squares backwards to find the leaves.

8a. Various answers, for example: The turtle can move one square right and three squares backwards. The ladybird can move three squares forwards and three squares right.

9a.



Reasoning and Problem Solving

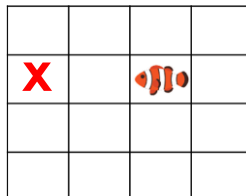
Describing Movement

Developing

1b. Rhea is incorrect. The star is two squares down and two squares right from the circle.

2b. The snail can move three squares forward.

3b.

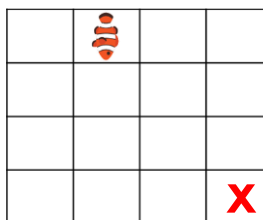


Expected

4b. Genie is incorrect. The snail should move two squares forward to find the leaves.

5b. Various answers, for example: The hedgehog can move two squares right. The worm can move three squares backward.

6b.



Greater Depth

7b. Paulo is incorrect. The bird should move two squares backwards and three squares left to find the worm.

8b. Various answers, for example: The hedgehog can move two squares forward and three squares left. The ladybird can move one square right and one square forward.

9b.

