Year 2
Maths
W.B 06.07.20

Task 1 – Describing movements.

Today, we will be describing movements using the vocabulary ‘forwards, backwards, left and right.’

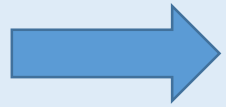
Before starting the tasks on the next page, you could practise moving object, or yourself, forwards, backwards, left and right.

Forwards
This is the way you are currently facing.

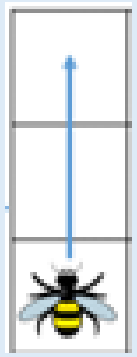
Backwards
This is directly behind you.

Left

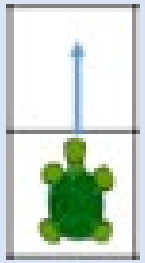
Right

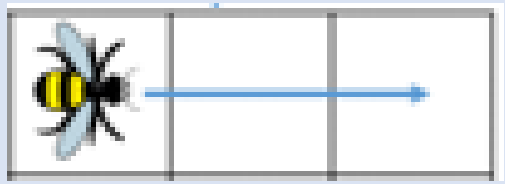


You could also use the words up and down in some instances. For example this bee has moved **forwards** two squares or two squares **up** the chart.



Both of these animals are moving forwards, because they are moving in the direction that they are facing, even though they are facing different directions.





Complete the tasks below.

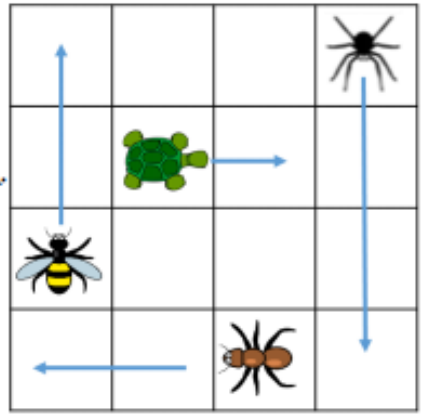
Complete the stem sentences to describe the movements made.

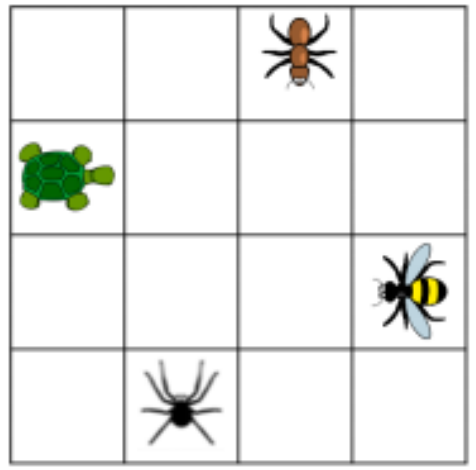
The  has moved 1 square _____.

The  has moved ___ squares _____.

The _____ has moved 2 squares up.

The ____ has moved ___ squares down.





Record these movements on the grid using arrows.

The  moves 1 square right.

The  moves 3 squares forward.

The  moves 1 square down.

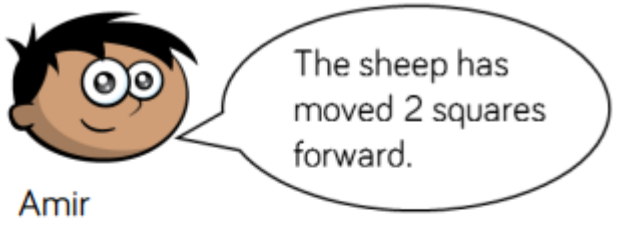
The  moves 1 square up.

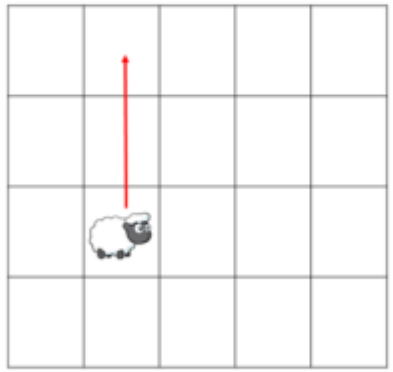
Using the words forwards, backwards, left and right, give someone at home some instructions. You might be telling them how to get to the back door, how to get from one room to another.

For example:

1. Move 3 steps to the right.
2. Now move 2 steps forward.
3. Move 5 steps left.

Challenges

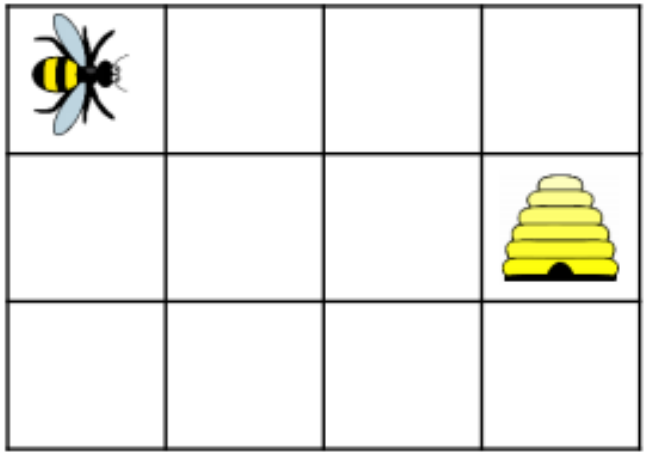




Is Amir correct?
Explain your reasoning.

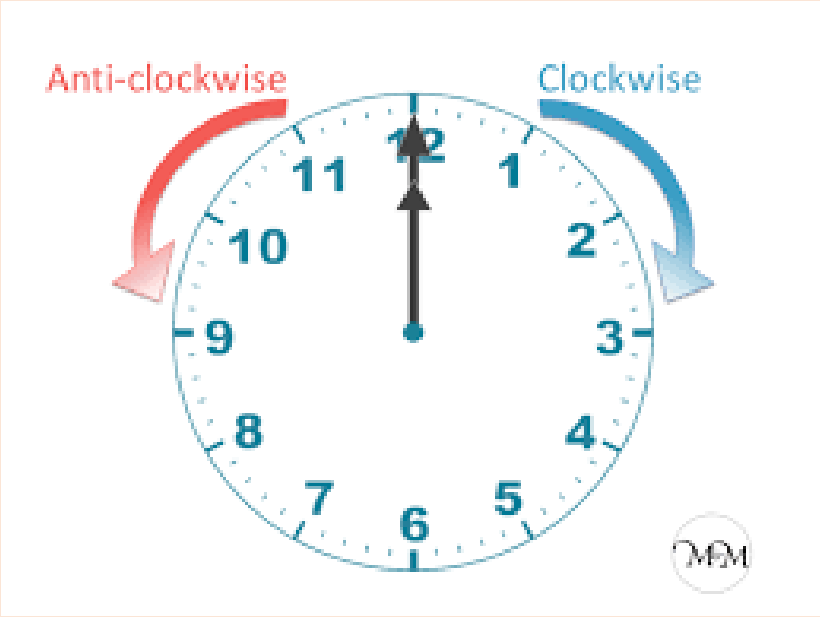
How many different routes can you write for the bee to get to the hive?

Use the words forwards, backwards, left and right.

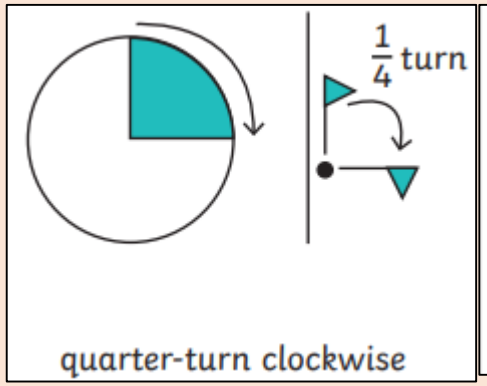


Task 2– Describing turns

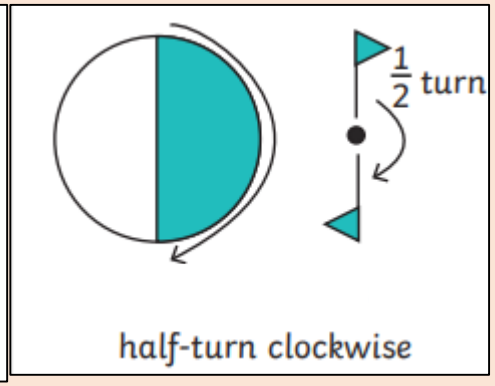
Today, we will be using the language anticlockwise and clockwise to describe the direction of turns.
We will also use the language ‘quarter turn, half turn, three-quarter turn and full turn’ to describe how far an object has turned.



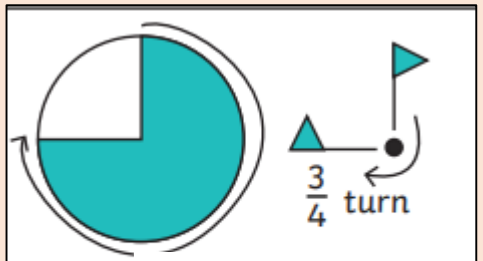
Clockwise



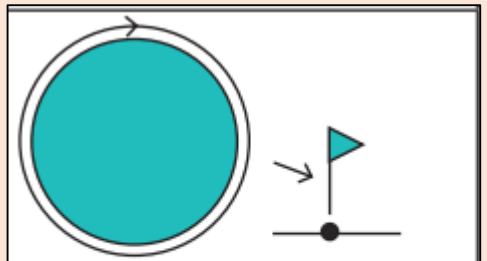
quarter-turn clockwise



half-turn clockwise

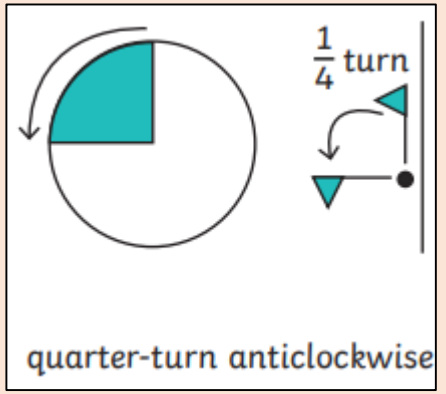


three-quarter turn clockwise

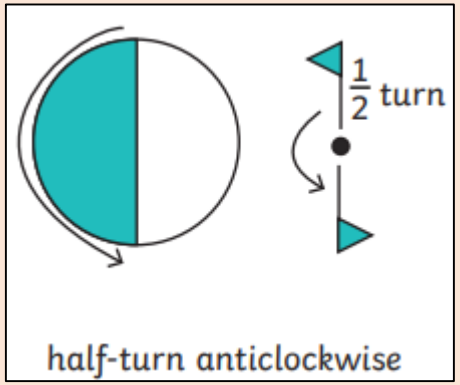


complete turn clockwise

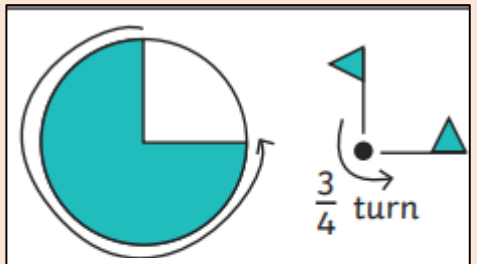
Anticlockwise



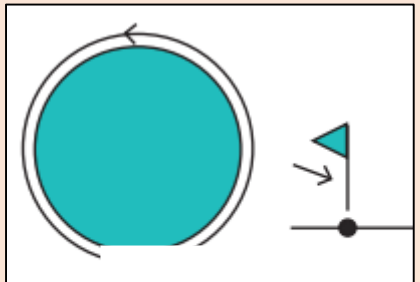
quarter-turn anticlockwise



half-turn anticlockwise



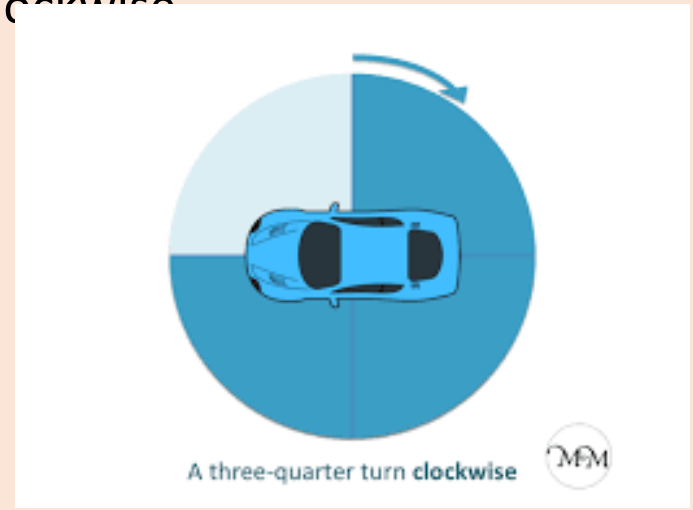
three-quarter turn anticlockwise



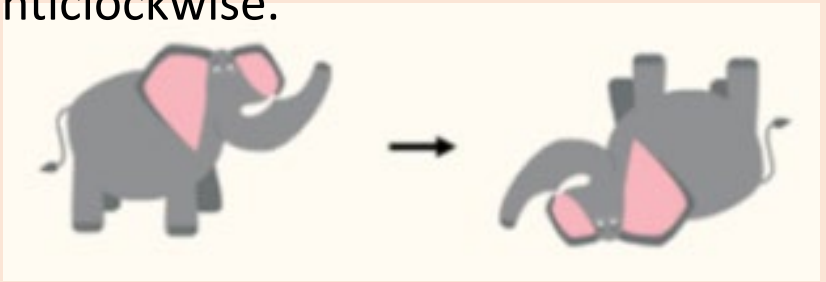
complete turn anticlockwise

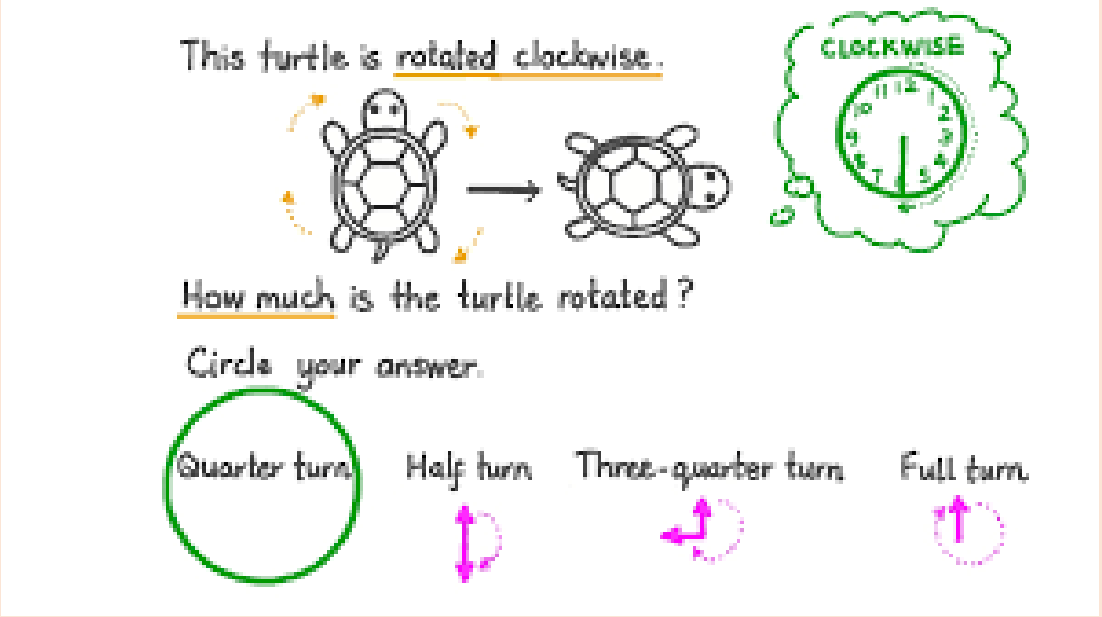
Examples

This car has made a 3 quarter turn clockwise



This elephant has made a half turn. It could have been clockwise or anticlockwise.





Complete the tasks below.

Match the turn to the description.

A full turn.

A quarter turn clockwise.

A half turn anticlockwise.

Describe how the triangle has turned each time.

The triangle has made a _____turn _____.

The triangle has made a _____ turn _____.

The triangle has made a _____ turn _____.

Turn a figure.

Ask your partner to describe the turn using the language, 'full turn', 'half turn', 'quarter turn', 'three-quarter turn', 'clockwise' and 'anticlockwise.

Challenges

Look at the number shape below:

How could the number shape have turned?

Describe all possibilities.

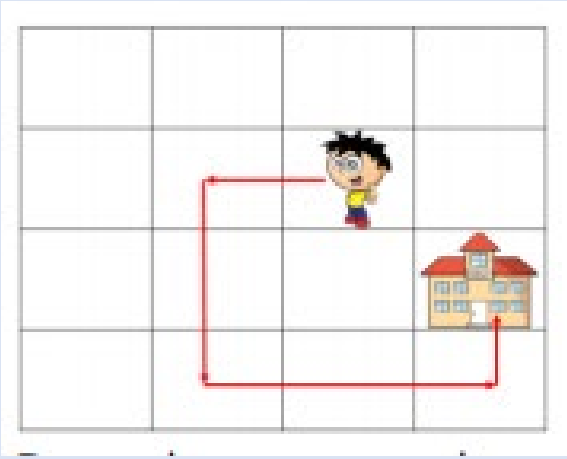
Always, Sometimes, Never

If two objects turn in different directions they will not be facing the same way.

Task 3 – Describing movements and turns

In this task, children use their knowledge of movement and turns to describe and record directions.
They need to be aware of the direction the object is facing
before it is turned.

Example



To get to school, Dennis made the following moves and turns.

- Dennis moved forwards 2 paces.
- Next he made a quarter turn anticlockwise.
- Dennis moved forward another two spaces.
- He then made another quarter turn anticlockwise.
- He moved forwards 2 spaces again.
- Then he made another quarter turn anticlockwise.
- Finally, he moved 1 space forwards.

Let’s practise.

Print this page out if you are able to. If you cannot, you could hold a toy up to the screen or draw your own table with the school on. Find a toy, counter, or other object to be the child – Make sure your table has the same amount of squares.

Follow these instruction to get the child to school.

1. Make a quarter turn clockwise.
2. Move 2 spaces forward.
3. Make a quarter turn clockwise.
4. Move two steps forward.
5. Make a quarter turn anticlockwise.
6. Move two steps forward.

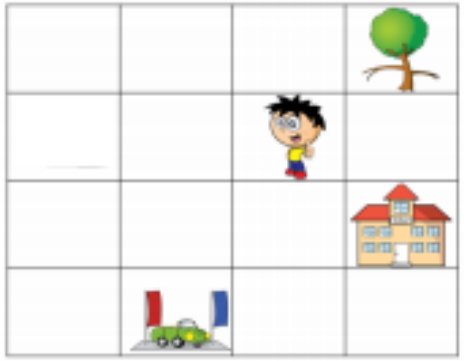
Can you find a way to get to school in less

Complete the tasks below.

Draw the route to show these directions.

Forward 1 square. Turn left.
Forward 1 square, quarter turn anti-clockwise.
Forward 1 square. Make a quarter turn clockwise.
Forward 1 square. Make a three quarter turn anti-clockwise. Forward 3

Write directions for Dennis to get to each place on the map.

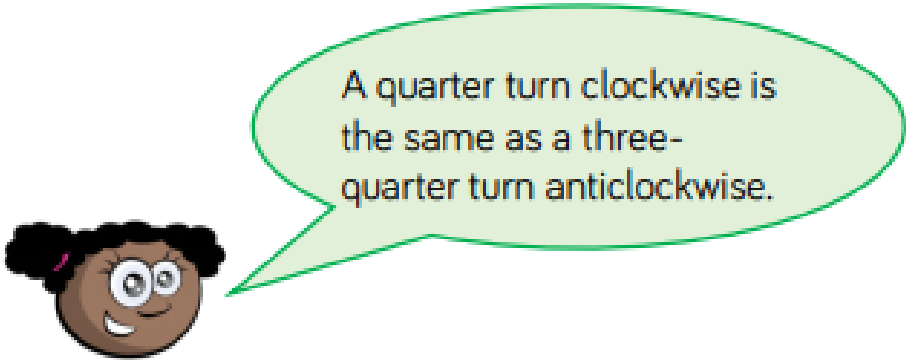


Start in the same place each time.

Challenges

How many different routes can you find to get from start to finish.
Use the words 'forwards', 'backwards', 'clockwise', 'anti-clockwise' and 'quarter turn'.

Is Whitney correct?



Convince me.

Task 4 – Application of movement and turns to patterns with shapes.

In this task, children will describe and create patterns that involve direction and turns.
Children should use the language ‘clockwise’, ‘anti-clockwise’, ‘quarter’, ‘half’ and ‘three quarters’ to describe patterns.

Example

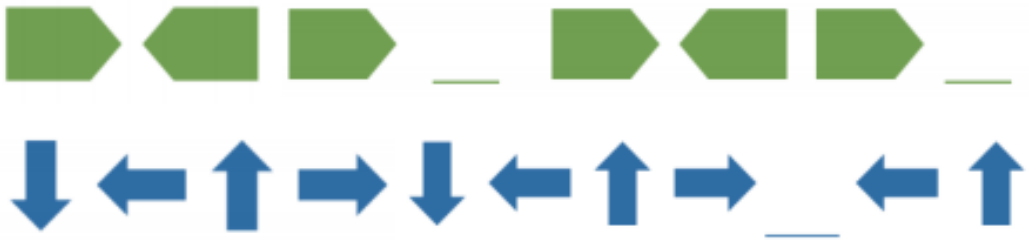
The next shape in this pattern will be another rectangle. It will move one quarter turn clockwise compared to the last rectangle.

Complete the tasks below.

Continue these patterns by adding the next 3 shapes.

Describe the turn for each pattern.

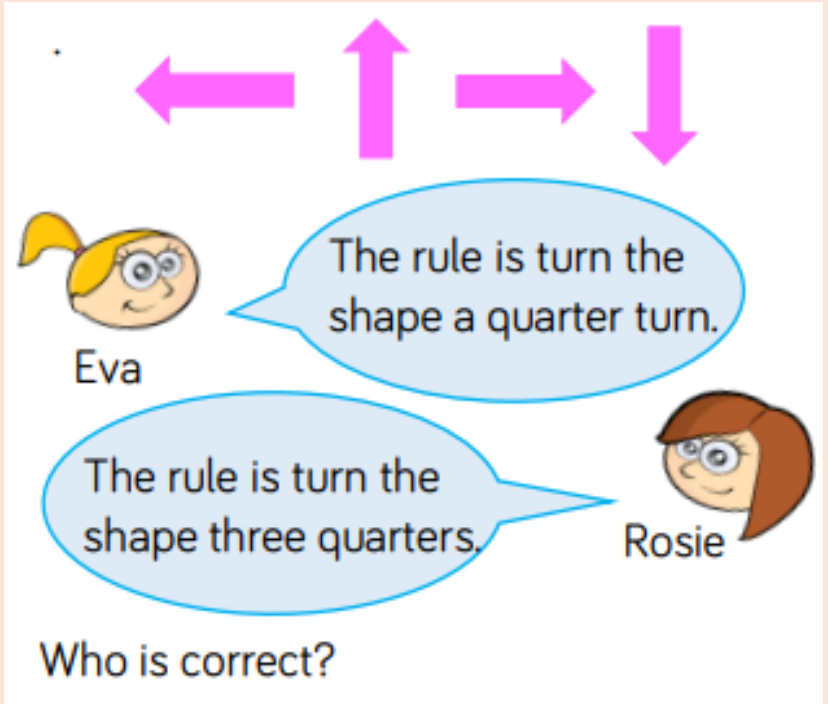
Fill in the missing shapes to complete the patterns.



Challenges

How many different patterns can you create using this shape?

Spot the mistake in each pattern.
Explain why they are incorrect.



Task 5 – arithmetic questions.

The following questions are based on number knowledge. We have covered multiplication, division, fractions, addition and subtraction over the past few weeks. If your child struggles with this, you may wish to return to work set over the previous weeks to support them or refresh their memories.

Day 5 – arithmetic questions.

1	4 + 3 =
2	1 + 3 + 6 =
3	25 + 5 + 5 =
4	60 − 50 =
5	68 + 8 =
6	24 − 13 =
7	94 − 60 =
8	75 + 14 =
9	18 − 9 =
10	$\frac{1}{2}$ of 16=
11	12 × 2 =
12	90 ÷ 10 =
13	55 ÷ 5 =
14	4 × 6 =
15	$\frac{3}{4}$ of 20=