

White

**Rose
Maths**

Summer - Block 3

Position & Direction

Overview

Small Steps

Notes for 2020/21

- Describe turns
- Describe position (1)
- Describe position (2)

Practical activities are encouraged to help children understand how to describe position, direction and movement, including whole, half, quarter and three quarter turns.

Consider omitting the language of half and quarter turns if fractions was not covered.

Describe Turns

Notes and Guidance

Children use the language ‘full’, ‘half’, ‘quarter’ and ‘three-quarter’ to describe turns made by shapes/objects.

Children should practically turn objects, shapes and themselves in different directions but do not need to describe the direction of the turns. Children should investigate whether they can finish facing the same direction if they complete different turns.

Mathematical Talk

What is each turn called?
Is there only one direction shapes/objects can move in?

Does it make a difference which way the shape / object / person is turned?

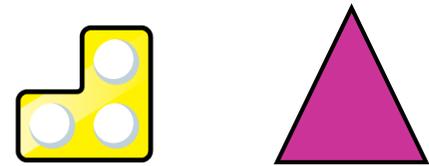
What part of a whole has the shape/object turned?
What will the shape/object look like before or after the turn?

Varied Fluency

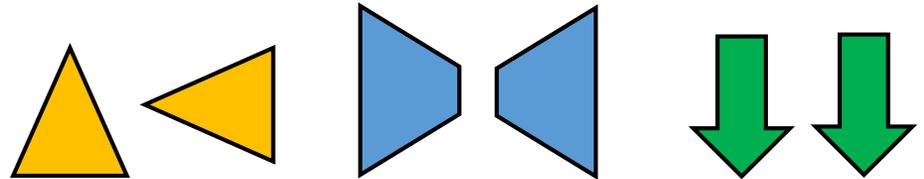
Give the children instructions using the language ‘quarter turn’, ‘half turn’, ‘three quarters turn’ and ‘full turn’. Children could then work in pairs to give and follow directions. This could be developed into a routine with music or as the children line up.

Draw what each shape will look like once it has turned a:

- quarter turn
- half turn
- three-quarter turn
- full turn



Complete the sentence to describe the turns these shapes have made.



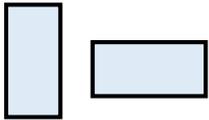
The shape has turned a _____ turn.

Describe Turns

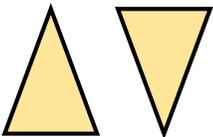
Reasoning and Problem Solving

Are these statements correct?
Is there more than one answer?
Explain how you know.

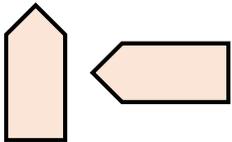
The shape has made a quarter turn.



The shape has made a half turn.



The shape has made a three-quarter turn.



Correct in either direction. It could also be a three-quarter turn in either direction.

Correct in either direction.

The shape could have made a three-quarter turn clockwise or a quarter turn anti-clockwise.

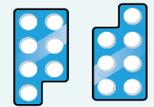
Alex turns her number shape and it finishes facing this direction.



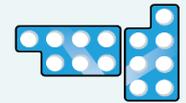
What direction could it have started facing?

What turn could it have made?

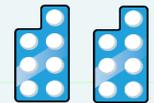
A half turn.



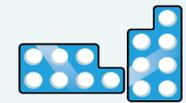
A quarter turn



A whole turn



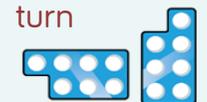
A quarter turn



A three-quarter turn



A three-quarter turn



Describe Position (1)

Notes and Guidance

Children use 'left', 'right', 'forwards' and 'backwards' to describe position and direction. They will describe the position of objects and shapes from different starting positions.

You could use board games such as Snakes and Ladders and Twister to explore positional language.

Where possible, this concept should be explored practically.

Mathematical Talk

What are the different directions we can move in?

How would I get to the?

How could you describe the movement?

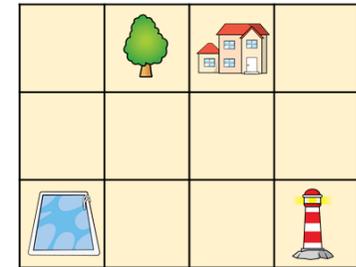
How could we record the movement?

How would I get from the to the?

Varied Fluency

Use cones to mark out a route for a partner. Describe the route your partner needs to take using the words 'left', 'right', 'forwards' and 'backwards'.

Use a grid to move a bot to different places. Use the words 'left', 'right', 'forwards' and 'backwards' to describe the movements.



Complete the sentences using 'left' and 'right' to describe the position of the coins.



The £1 coin is to the _____ of the 1p coin.

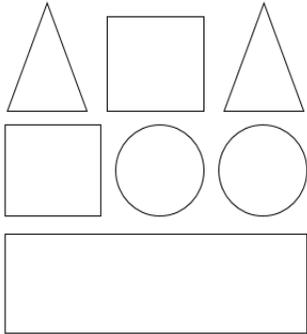
The 50p coin is to the _____ of the 1p coin.

The 2p coin is to the _____ of the 50p coin.

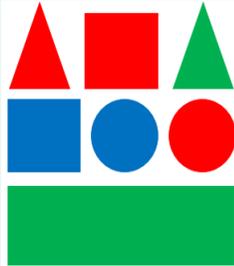
Describe Position (1)

Reasoning and Problem Solving

Use the clues to colour the shapes.

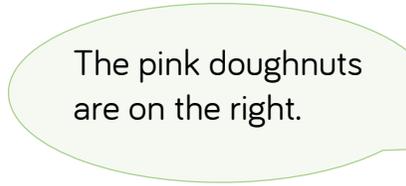


- The circle in the middle is blue.
- The circle on the right is red.
- The shape up from the right circle is green.
- The shape down from the circles is green.
- The square to the left of the green triangle is red.
- The four-sided shape up from the rectangle is blue.
- The triangle on the left is red.



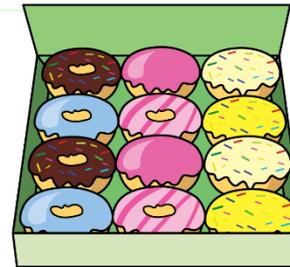
Mo

The pink doughnuts are on the left.



Alex

The pink doughnuts are on the right.



Who is correct?
Explain how you know.

Both children could be correct because they have not stated what the pink doughnuts are left or right in relation to.

The pink doughnuts are on the left of the yellow doughnuts and the pink doughnut are on the right of the blue and brown doughnuts.

Describe Position (2)

Notes and Guidance

Children will build upon directional language ‘left’ and ‘right’ to assist with describing position. They will describe position using: ‘top’, ‘in between’, ‘bottom’, ‘above’ and ‘below’. Children explore the position of objects and shapes from different starting points.

Where possible, this concept should be explored practically both in and out of the classroom.

Mathematical Talk

Where is the ____ in relation to you?

What is ____ of you?

What is ____ of this object?

How can we describe the position of ____?

Can you create your own instructions to build a tower?

Varied Fluency

- Think about where you are sitting in the classroom. What can you see around you? Complete the table.

In front of me	Behind me	To the left of me	To the right of me

- Use objects in your classroom or outside area to complete the sentences. Use the words: ‘top’, ‘middle’, ‘bottom’, ‘above’ and ‘below’ to describe the position.

The _____ is above _____.

The _____ is below _____.

In between _____ and _____ is _____.

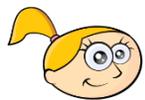
Above _____ is _____ and _____.

There is nothing between _____ and _____.

- Use 5 cubes to build a tower.
 - Start with a yellow cube.
 - Place a blue cube on top of the yellow cube.
 - Place a white cube below the yellow cube.
 - Place a red cube on the top of the tower.
 - Place the green cube in between the yellow and white cube.

Describe Position (2)

Reasoning and Problem Solving

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Jack is directly above Alex.
 Eva is directly below Alex.
 _____ is to the right of Eva.
 There is no-one above Amir.
 What are the missing names?
 Add people to complete the grid and describe where they are.

How many different ways can you describe the position of the 2p coin?



Possible answers may include:

- The 2p coin is:
- Below** the 50p
- Above** the 10p
- In between** the £1 and 5p
- To the **left** of the 5p
- To the **right** of the £1