White Rose Maths

Summer - Block 3

Position & Direction

Year 1
Describe turns
Describe Position (1)
Describe Position (2)

Describe position, direction and movement, including whole, half, quarter and three quarter turns
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.

A half turn.

A whole turn

A quarter turn

A three-quarter turn

What direction could it have started facing?

A quarter turn

A three-quarter turn

A three-quarter turn

What turn could it have made?
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.

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 ........?

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.
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.

The pink doughnuts are on the right.

Mo

The pink doughnuts are on the left.

Alex

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.
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.

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?

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

<table>
<thead>
<tr>
<th>In front of me</th>
<th>Behind me</th>
<th>To the left of me</th>
<th>To the right of me</th>
</tr>
</thead>
</table>

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)

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

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.

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