Old Town Infant School and Nursery

MATHS MEDIUM TERM PLANNING

Coastal Learning PARTNERSHIP

Year 1 – Geometry: Position and Direction (Approximately 1 week)	
Objectives from Progression Document	**describe position, using words like** left, right**, top, middle, bottom, on top of, in front of, above, between around, near, close, far, inside, outside** **describe their own movement using words like forwards, backwards,** sideways, left, right, **up, down** **describe their own turning movement, including whole, half, quarter and three-quarter turns**
Previous Learning	use positional language such as top, bottom, middle, between, inside describe their relative position such as 'behind' or 'next to' or 'in front'
Vocabulary	direction, left, right, across, close, far, near, along, through, to, from, towards, away from, movement, slide, roll, turn, whole turn, half turn
Key fact(s)	To know that a clock can be used to remember quarter, half and three quarter turns
Number facts for fluency	Revision of counting in fives Using and making 7 and 9: 3+6, 6+3; 7-3, 7-4; 9-3, 9-6
DfE Ready to Progress Guidance Pages https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897806/Maths_guidance_KS_1_and_2.pdf	Not applicable
NCETM Ready to Progress Exemplification https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/	Not applicable
Problem Solving and Reasoning Skills Objectives	N/A
Pre-assessment:	EYFS - use positional language such as top, bottom, middle, between, inside; describe their relative position such as 'behind' or 'next to' or 'in front'

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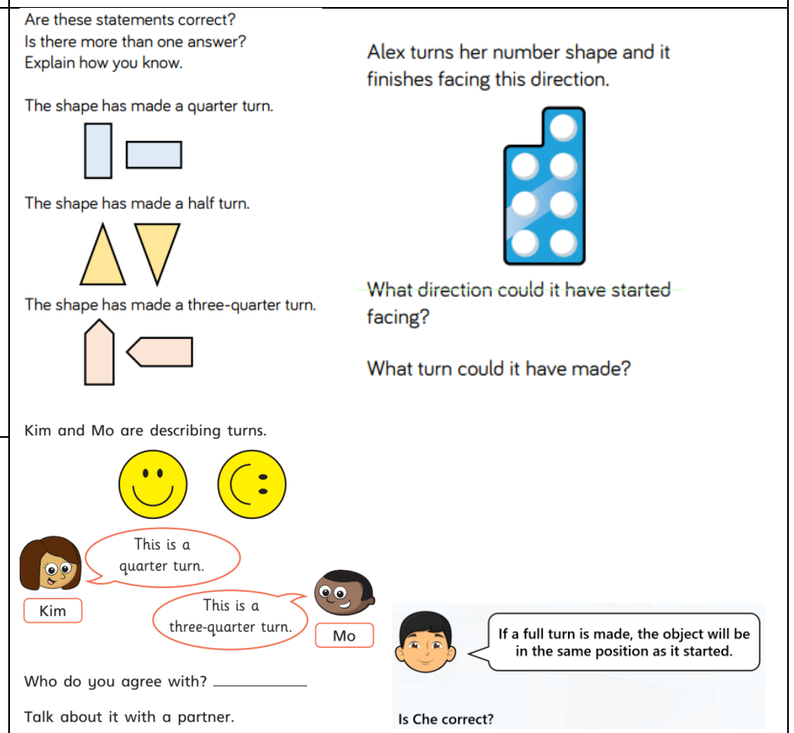
Sequence of Learning

White Rose Small Steps	Learning Intention	Key Questions	Sentence Stems	Problem-solving links	Comments	Extension and Greater Depth Opportunities
Describe turns	**To describe movement in quarter, half, three-quarter and full turns**	What is a turn? How do you make a full turn? How do you make a half/quarter turn? If this is a quarter turn, what do you think a three-quarter turn is? Does it always matter which direction you turn? Can you get to the end position in more than one way?	This is a _____ turn. The _____ has turned a _____ turn. I have turned a _____turn. A turn is the same as …	Turning (maths.org) Using discs to portray different turns. Olympic Rings (maths.org) Using language of position to describe a pattern.	Children should be given lots of opportunities to practically turn objects as well as experience the motion of turns themselves. Children should be able to identify the size of a turn by looking at the starting and finishing position of a shape as well as drawing the result of a turn. This provides a useful opportunity to revisit learning on 2-D and 3-D shapes. Children should investigate whether they can end up facing the same direction if they complete different turns, but they do not need to describe the direction of turns at this stage Children may forget where they began the turn. Children may naturally always turn in one direction and should be encouraged to explore both ways	
Describe position – left and right	**To use the words left and right to describe position**	Which is your left/right hand/foot? What do you notice when you hold up the thumb and index finger of your left hand? How can you get to the ___? How can you get from the ___to the ___? Is the ___ to the left or right of the ___? Which shape(s) is/are to the left/right of the ___?	The ___ moves to the ___. The ___ is to the left/right of the ___.		Children often confuse the two directions, so look for ways to support children in remembering them, such as rhymes, the “L” shape shown between the index finger and thumb on the left hand and perhaps what hand they use to write with. Children also explore describing the direction of movement as being to either the left or the right, then describing the position of one object in relation to another, for example “The is to the left/right of the _____”. Children may become confused when an object is looked at from a different perspective from their own. When you are facing someone, the position of their left hand does not appear to match yours.	
Describe position – forwards and backwards	**To use the words forwards and backwards to describe position**	How can you get from the ___ to the ___? How could you describe the movement? If two objects both move forwards/ backwards, are they moving in the same direction? How many squares forwards/backwards/ left/right has the ___ moved?	The ___ moves ___ squares forwards/backwards. To get to the ___, the ___ needs to move forwards/ backwards. To get to the ___, the ___ needs to move ___ squares forwards/backwards, then ___ squares left/right.		Children describe the positions of objects and shapes from different starting positions. To begin with, they move their bodies in line with instructions to move forwards and backwards and understand what these terms mean in a practical context. Instructions can then become more specific, such as “3 steps forwards”. Once confident, children can then combine prior knowledge of “left” and “right” with “forwards” and “backwards” to describe more complex movements. Children may confuse facing forwards with moving forwards. Children may have difficulty with combining various instructions, for example “Move 3 squares forwards, then 2 squares left, then 1 square backwards.”	
Describe position – above and below	**To use the words above and below to describe position**	How could you describe “above”? How could you show me “below”? What is above the ___?	The ___ is below the ___. The ___ is above the ___.		Children use this language to firstly describe the position of objects in relation to each other, for example, “The is above/below the	

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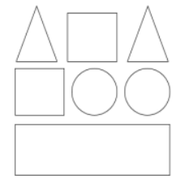
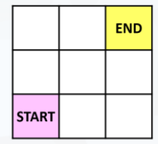
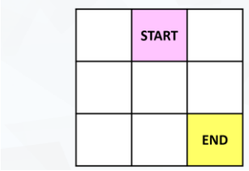
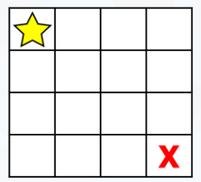
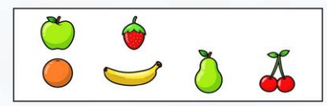
		What is below the ___? Is the ___ above or below the ___? Which ___ is at the top/bottom?	The ___ at the top/bottom is ___.		____ ". They then follow and give positional instructions and clues to others, for example to build a tower of cubes. Children can also start to explore the terms "top" and "bottom". Children may use "over" and "under" when thinking about "above" and "below". When interpreting 2-D representations, children may confuse "above" and "below" with "forwards" and "backwards".	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. 
Ordinal numbers	To describe the position of something using ordinal numbers	What does "first" mean? When would you use the word "last"? When might you use ordinal numbers? Is there always fourth? Is there always first and last? Why? Where is the ___ cube in the tower? How can you work out where is?	I know that ___ is ___ because… The person who wins the race comes ___. ___ came last in the race. The position after ___ is ___. The position before ___ is ___.		This small step covers a non-statutory statement in the Year 1 curriculum. It has been included to support children to recognise numbers used to describe the position of something. It also links to previous learning such as ordering numbers. Ensure that children have experience of not only 1st, 2nd, 3rd, but also identifying and representing other ordinal numbers and using them to explain events. They can record positions using numerals and the endings "st", "nd", "rd" and "th" as well as the words "first", "second", "third", "fourth" and so on. Children may also use the word "last" to denote the final position in a group. Children may confuse the ordinal number with the total number. Children may not be aware that ordinal numbers can change if the order changes.	Give your partner directions to move around the classroom. Use the word bank. forwards backwards left right Spot the mistake in the route to get from the start position to the end position.  How many different routes can you find to get from the start to the end position?  How many different routes can you find?  What is the shortest route? Which sentences are correct?  The strawberry is up from the banana. The cherry is to the left of the pear. The orange is up from the apple. The banana is to the right of the orange.

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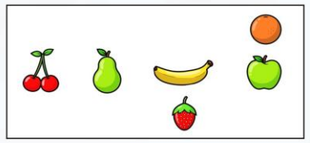
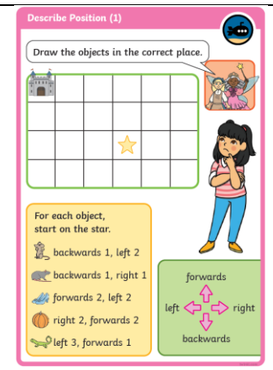
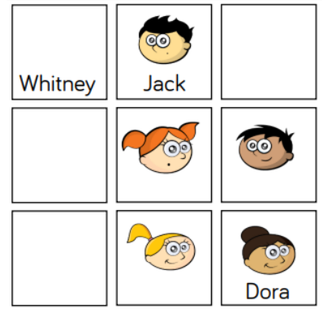
Write your own sentences to describe the positions of the fruit.



Word Bank: up down left right



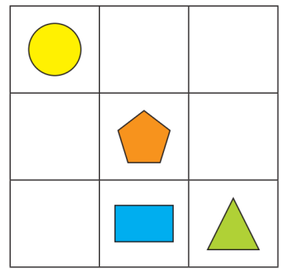


Jack is directly above Alex.
Eva is directly below Alex.
_____ is to the right of Eva.
There is no-one above Amir.
What are the missing names?
Add people to complete the grid and describe where they are.

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

Make your own tower of cubes and describe it to a partner.

Can your partner build the tower?



There is a pentagon in the middle.

There is a star to the right of the circle.

There is a smiley face to the left of the rectangle.

There is a heart above the triangle.

There is a square below the circle.

Make up your own problem like this for a partner.

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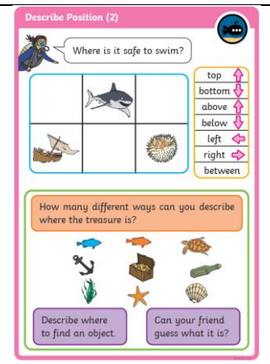
						Use 5 cubes. Start with a green cube. Put a blue cube to the left of it. Put a brown cube below the blue. Put a red cube to the right of the green. Put a yellow cube above the red.	
						Which drawer will Ziggy open? You may ask him four questions to identify the drawer. He can only answer 'Yes' or 'No'. Which four questions would you ask? Explain your reasoning.	
Post-assessment:	WRH end of block position and direction assessment – snip as feel appropriate						