

William Morris Maths Planning Subject topic: Using art to inspire maths: coordinates, position and direction.

School based maths lessons

Subject: Maths/ Art		Class:	Day:			
<p>National Curriculum Links:</p> <ul style="list-style-type: none"> ♣ describe positions on the full coordinate grid (all four quadrants) ♣ describe positions on a 2-D grid as coordinates in the first quadrant <p>♣ learn about great artists in history and use them for inspiration in own art.</p> <p>♣ improve their mastery of art and design techniques.</p>						
<p>Session/ Title : 3 Coordinates in all four quadrants</p>						
Learning Intention	Success Criteria	Key Vocabulary	Teacher & Pupil Activity (Indicate the groups that will be supported and by whom)	Plenary	Resources	Differentiation
To understand how to plot points on all four quadrants.	<ul style="list-style-type: none"> I can use my understanding of negative numbers to read all four quadrants. I can move along and up or down a grid. I can read the coordinates on a grid. I can plot the points on a grid. I can use my understanding of shape to solve problems. 	Vertical Horizontal x-axis y-axis grid co-ordinates quadrant 1 quadrant 2 quadrant 3 quadrant 4 negative numbers	<p>Introduction: Show the children two quadrants. The children should identify what is the same and what is different from the one quadrant grid that they looked at in lesson 1. What do they notice about the numbers in quadrant 2? Recap negative numbers.</p> <p>Activity 1: Show the children three points A, B and C. Can they work out what the coordinates are? Discuss moving along the x-axis in both positive and negative numbers. Challenge: If point D joined the points as a rectangle, what would the coordinates be? This relies on the children understanding the basic dimensions of a rectangle in order to anticipate the final point.</p> <p>Activity 2: Independent task These are test-based questions that allow the children to use reasoning with their conceptual understanding of coordinates and shape. These could be given out individually or photocopied on A3 and discussed and analysed as a team.</p> <p>Activity 3: William Morris Battleship Play battleship in pairs</p>	William Morris Battleship This game works the same as battleship but with objects from a William Morris print. The object of the game is for children to reinforce the vocab for coordinat	-'Test based questions' resource sheet - 'William Morris Battleship instructions' resource sheet - 'William Morris Battleship quadrant' resource sheet (differentiated)	'William Morris Battleship' resource sheet can be used on one quadrant or four depending on the capability of children.

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