

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: 2 Coordinates in quadrant 1</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 coordinates on a one quadrant grid.	I can label the x-axis I can label the y-axis I can move along and up a grid I can read coordinates on a grid I can plot points on a grid.	Vertical Horizontal x-axis y-axis grid co-ordinates quadrant	<p>Introduction: Introduce the children to a grid. What do they already know about co-ordinates? Recap the children's learning from previous years.</p> <p>Activity 1: Ask the children to write the instructions to plot the point (5,4) on a whiteboard. What instructions do you need? Which don't they need? Do they need to be more specific about anything? This will allow you address any misconceptions and gauge the level of understanding in the class.</p> <p>Go through the correct way to plot the points on the grid using correct vocabulary. Children should improve and adjust their whiteboards to make sure that they can follow their own instructions correctly.</p> <p>Follow up: The children plot three more coordinates, using the instructions crafted on their whiteboards.</p> <p>Activity 2: Independent task</p>	Children show peer-assess the work from the lesson. Have they understood how to plot coordinates? They could then colour the image in using inspiration from William Morris images. (see	-Squared paper. - 'Using coordinates to create art' resource sheet - Maths resources (numicon, tessellating shapes, tangrams, counters)	Extension: Children could add to their image and write the extra coordinates needed.
		<p>Key Questions What is the x-axis? What is the y-axis? How do you move along a grid? What do coordinates look like?</p>				

			Show the children how to draw and label the x and y-axis. Give the children the resource sheet and model how to plot co-ordinates and join each dot together with a line. Explain that this works in a similar way to dot-to-dot and will create a William Morris inspired image.	examples)		
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