

Zara's Pattern Explorer Study

Learning objective: To identify, analyze, and recreate geometric and organic patterns inspired by nature and art.

Join Zara the zebra on an artistic quest! Look closely at the world around you to find different types of patterns. Use this template to document your observations and plan your own original pattern design. Remember to use descriptive vocabulary to explain how the patterns are created.

Word bank: geometric · organic · symmetry · tessellation · repetition · motif · alternating · asymmetrical

1. Pattern Identification: Find a pattern in your classroom or outdoors. Describe what the pattern looks like and whether it is organic (natural) or geometric (man-made). (2 marks)

2. Analysing Motifs: Identify the 'motif' (the single shape or unit that repeats) in your chosen pattern. How does this shape change as it repeats? (2 marks)

3. Pattern Rules: If you were to create a set of instructions for someone else to draw this pattern, what rules would you give them about size, color, or spacing? (3 marks)

4. Mathematical Connection: Look at your pattern. Can you see any symmetry? Explain if it is reflective symmetry (like a mirror) or rotational symmetry. (2 marks)

5. Creative Application: Zara wants to design a new pattern for a zebra crossing. Describe your own original pattern idea using at least three words from the word bank. (3 marks)

Extension challenge: Try to create a tessellating pattern on a separate piece of squared paper. Ensure that your shapes fit together perfectly without any gaps or overlaps, just like a honeycomb!