

Zara's Radiant Rangoli Designs

Learning objective: To understand the patterns, symmetry, and cultural significance of Diwali Rangoli, and to create a symmetrical design using geometric shapes.

Zara the Zebra loves how Rangoli patterns use bright colours and symmetry to welcome guests during Diwali. Follow the steps below to design your own Rangoli pattern. First, use the word bank to identify the key features of Rangoli. Then, complete the design challenge by answering the questions about how to construct your artwork.

Word bank: Symmetry · Geometric · Pattern · Rangoli · Pigment · Diwali · Reflection

1. Zara wants to make sure her Rangoli has 'line symmetry'. Explain what this means in your own words. Why is symmetry important for a traditional Rangoli design? (2 marks)

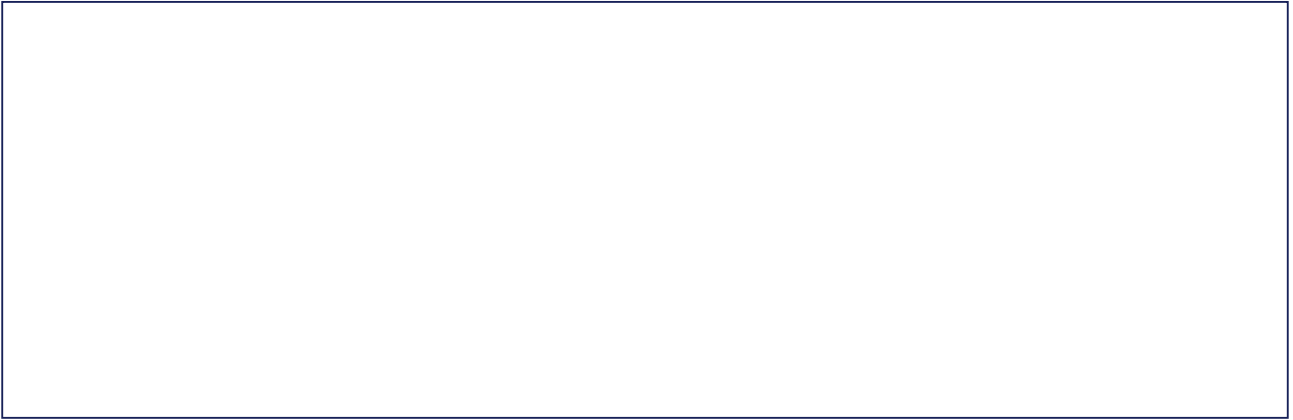
2. If Zara spends £4.50 on coloured sand and £2.25 on a stencil, how much does she spend in total? Show your working. (2 marks)

3. Rangoli patterns often use repeated shapes like triangles, squares, and circles. Which two geometric shapes would you use to create a border for your design? (2 marks)

4. Diwali is known as the Festival of Lights. Why do people create Rangoli patterns specifically at the entrance of their homes during this time? (2 marks)

5. Imagine your design is reflected in a mirror placed down the centre. Describe how the left side of your pattern would compare to the right side. (2 marks)

Draw: Using a pencil, draw a large square in the middle of your page. Create a symmetrical Rangoli pattern inside the square using at least three different geometric shapes (such as triangles, diamonds, or circles). Ensure that if you drew a line down the middle, both sides would be identical reflections.



Extension challenge: Try to create a second pattern that uses 'rotational symmetry'. This means if you turned your paper 90 degrees, the pattern would look exactly the same as it did when you started!