

Diwali Rangoli Patterns with Zara

Learning objective: To understand the cultural significance of Rangoli and apply knowledge of symmetry and geometric patterns to create an original design.

Read the questions carefully. Use your knowledge of shapes and symmetry to complete the tasks. Zara the Zebra is ready to help you design your own masterpiece!

Word bank: Symmetry · Geometric · Diwali · Festival of Lights · Pattern · Reflection · Coloured powder

1. Zara the Zebra is creating a Rangoli pattern on the floor. Explain why symmetry is an important feature in traditional Rangoli designs. (2 marks)

2. Rangoli is often created during the Festival of Lights. Describe two materials that you might use to create a Rangoli pattern if you were working outside on a doorstep. (2 marks)

3. If a Rangoli pattern has a vertical line of symmetry, what does this mean for the left and right sides of the design? (2 marks)

4. Look at a square grid. If you draw a triangle in the top-left corner of a 4x4 grid, where would you need to draw the same triangle to ensure the whole pattern has rotational symmetry? (2 marks)

5. Why do you think people choose to place Rangoli patterns near the entrance of their homes during Diwali? (2 marks)

Draw: Using a pencil, draw a symmetrical Rangoli design inside the provided square grid. Remember to include at least one geometric shape (like a circle, square, or triangle) and ensure that your pattern is balanced on both sides.



Extension challenge: Imagine you are selling 'Rangoli Starter Kits' to help children learn this art form. If one kit costs £4.50 and you sell 6 kits, how much money have you made in total? Show your working out.