# Max’s Magnificent Symmetry Challenge

*Learning objective: To identify, describe, and draw 2D shapes with lines of symmetry.*

Help Max the monkey solve these symmetry puzzles! Read each question carefully. Some questions ask for a choice, others for a true or false answer, and some need a one-word answer.

Answer Key: 1. B, 2. True, 3. False, 4. Vertical, 5. 4, 6. False, 7. C, 8. True, 9. 2, 10. True

*Word bank: Symmetry · Mirror line · Reflect · Horizontal · Vertical · Pattern · Shape · Equal*

**1. Max is looking at a square. How many lines of symmetry does a square have? A) 2, B) 4*, C) 1, D) 0 (1 mark)**

**2. True or False: A line of symmetry means both sides are exactly the same. (1 mark)**

**3. True or False: A scalene triangle has three lines of symmetry. (1 mark)**

**4. If a line goes straight up and down through a shape, what type of line of symmetry is it? (Vertical/Horizontal) (1 mark)**

**5. How many lines of symmetry does a regular rectangle have? (Write the number) (1 mark)**

**6. True or False: All 2D shapes have at least one line of symmetry. (1 mark)**

**7. Which of these letters has a vertical line of symmetry? A) F, B) G, C) A*, D) J (1 mark)**

**8. True or False: A circle has an infinite number of lines of symmetry. (1 mark)**

**9. How many lines of symmetry does a diamond (rhombus) have? (Write the number) (1 mark)**

**10. True or False: A line of symmetry acts like a mirror image. (1 mark)**

**Draw: Draw a butterfly with an open set of wings. Use a ruler to draw a vertical mirror line down the centre of the butterfly's body to show its symmetry.**

*Extension challenge: Find three objects in your classroom or home that have a line of symmetry. Write down the name of the object and describe where the line of symmetry is located (e.g., 'The window has a vertical line of symmetry down the middle').*