🔄 Multiple Axes of Symmetry

Grades 3–4 | Vertical & Horizontal Reflections

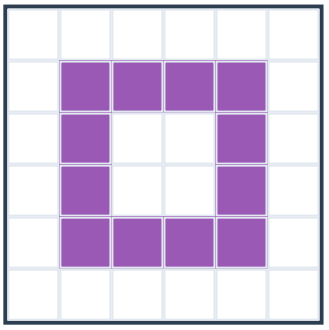
Name: _____ Date: _____

Task: Some patterns do not have only one, but **two or more mirror lines**! Recognize the axes and complete the pattern symmetrically.

Concept: Multiple Axes

Axis Type	Explanation	Example
Vertical Axis	Left and right are mirror images	Butterfly, leaf
Horizontal Axis	Top and bottom are mirror images	Arrow (pointing left/right)
Both Axes	Symmetrical both vertically and horizontally	Flower, snowflake, cross

Exercise 1: Which axes does this pattern have?



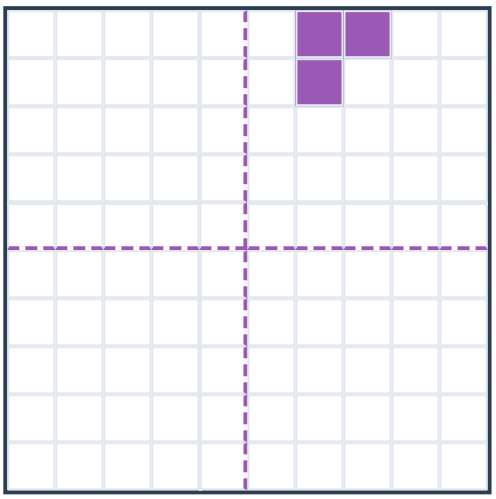
Tip: Look at the pattern. Can it be mirrored vertically? Horizontally? Or both?

Write down:

☐ Vertical axis (from top to bottom)
☐ Horizontal axis (from left to right)

Exercise 2: A rectangle with two axes

Complete the pattern based on the template:
(Top right is given, you complete the remaining 3 quadrants)



Exercise 3: My Symmetrical Pattern

Design a pattern that has **at least two axes of symmetry**. Use colored pencils or describe which colors you would use.

(Space for your pattern)

Tricky Questions

1. Can a pattern have 3 axes of symmetry? If yes, give an example!
2. How many axes of symmetry does a square have? (Circle, triangle?)
3. Is there a pattern with infinitely many axes?