## Step 2: Reflection

## National Curriculum Objectives:

Mathematics Year 5: (5P2) Identify, describe and represent the position of a shape following a refection or translation, using the appropriate language, and know that the shape has not changed

## Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Decide whether a statement is true or false when reflecting shapes using vertical and horizontal mirror lines. Regular polygons with up to 4 sides.
Expected Decide whether a statement is true or false when reflecting shapes and coordinates using vertical and horizontal mirror lines. Regular polygons with up to 6 sides. Greater Depth Decide whether a statement is true or false when reflecting shapes using vertical, horizontal and diagonal mirror lines, including some without grids. Irregular shapes with up to 8 sides.

## Questions 2,5 and 8 (Varied Fluency)

Developing Find the new coordinates when reflecting shapes across a mirror line using vertical and horizontal mirror lines. Regular polygons with up to 4 sides.
Expected Find the new coordinates when reflecting shapes across a mirror line using vertical and horizontal mirror lines. Regular polygons with up to 6 sides.
Greater Depth Find the new coordinates when reflecting shapes across a mirror line using vertical, horizontal and diagonal mirror lines, including some without grids. Irregular shapes with up to 8 sides.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Decide which statement is correct and explain why when reflecting a shape using vertical and horizontal mirror lines.
Expected Decide which statement is correct and explain why when reflecting a monochrome pattern using vertical and horizontal mirror lines.
Greater Depth Decide which statement is correct and explain why when reflecting a twotone pattern using vertical, horizontal and diagonal mirror lines, including some without grids.

## More Year 5 Position and Direction resources.

Did you like this resource? Don't forget to review it on our website.

1. True or false? The following images have been reflected correctly.
A.

B.

C.

2. Reflect the shape across the vertical mirror line. Label this shape ' $B$ '. Then reflect $A$ and $B$ across the horizontal mirror line. Label the new shapes $C$ and $D$.

3. Hafsa and Chuan are reflecting shapes across a mirror line.


Who has reflected the shape accurately?
Explain how you know.
4. True or false? The following images have been reflected correctly.
A.

B.

C.

5. Reflect the shape across the horizontal mirror line. Label this shape ' $B$ '. Then reflect $A$ and $B$ across the vertical mirror line. Label the new shapes $C$ and $D$.

6. Steph and Sean are reflecting patterns across a mirror line.


Who has reflected the pattern accurately?
Explain how you know.


## Reflection

7. True or false? The following images have been reflected correctly.
A.

B.

C.

8. Reflect the shapes across the diagonal mirror line. Label the new shapes C and D.


HW/Ext
9. Alice and Johnny are reflecting patterns across a mirror line.


Who has reflected the pattern accurately? Explain how you know.

## Developing

1. $A$ is false, $B$ is true, $C$ is true
2. 


3. Hafsa is correct, she has reflected the pattern across the mirror line. Chuan has copied the image but not reflected it.

## Expected

4. $A$ is false, $B$ is false, $C$ is true
5. 


6. Steph is correct, she has reflected the pattern across the mirror line. Sean has copied the image but not reflected it.

## Greater Depth

7. A is true, $B$ is false, $C$ is false
8. 


9. Alice is correct, she has reflected the pattern across the diagonal mirror line. Sean has only reflected part of the pattern accurately.

