

# TRANSFORMATIONS

## MTH 4-18b

I can apply my understanding of the 4 quadrant coordinate system to move and describe the transformation of a point or shape on a grid.

**Pupils should be able to:**

- Move and describe a translation on a 4 quadrant coordinate grid.
- Recognise translation and rotational symmetry in designs.
- Design and create tiling patterns which have translation, rotational and reflective symmetry.

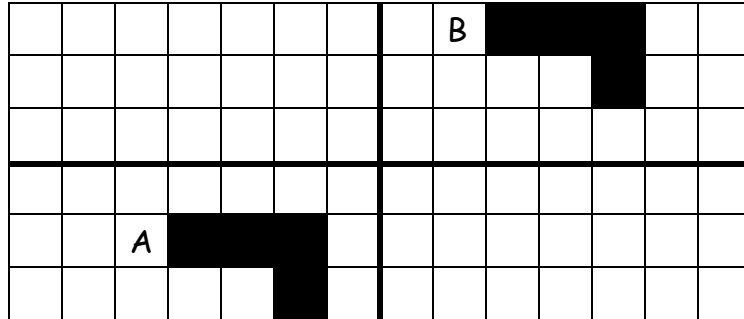
PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Describe a translation on a 4 quadrant grid Questions 1- 2			
Move a shape given the translation Questions 3 - 4			
Recognise translation and rotational symmetry Question 5			
Create a tiling pattern Question 6			

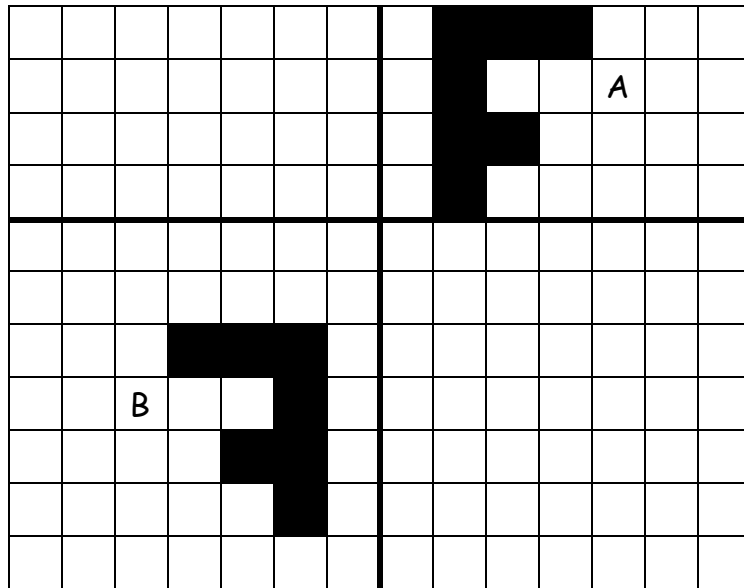
SELF EVALUATION EXERCISE

DATE DUE \_\_\_\_\_

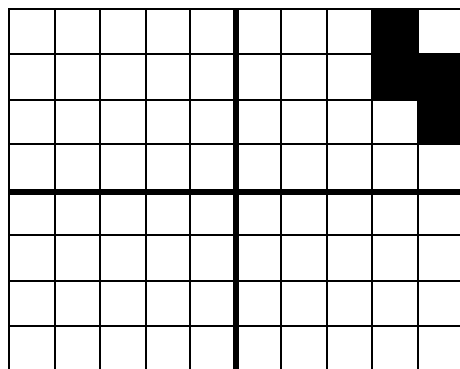
1 Describe the translation of shape A to shape B



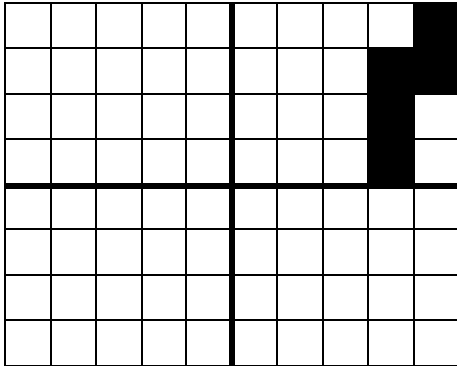
2 Describe the translation of shape A to shape B.



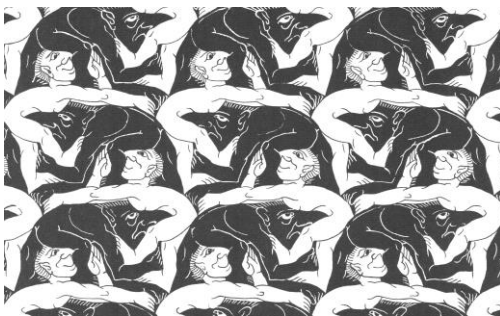
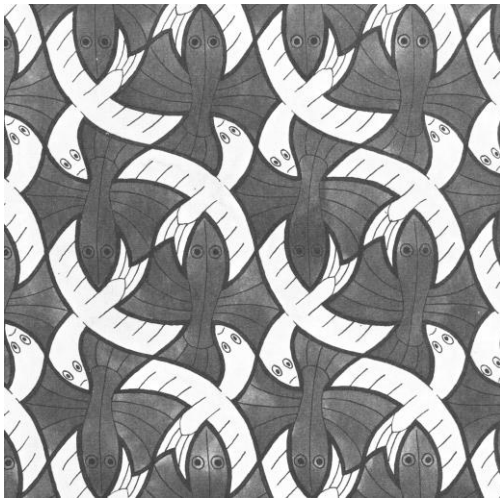
3 Move the shape 2 to the left and 3 down.



4 Give the shape a  $180^\circ$  rotation about the point  $(1, 1)$ .



5 Study the following designs carefully. Match the labels to the designs.



- A *Glide reflection*
- B *Rotational symmetry*
- C *Translational symmetry*

6 In the space below create a tiling pattern based on this tile.

