



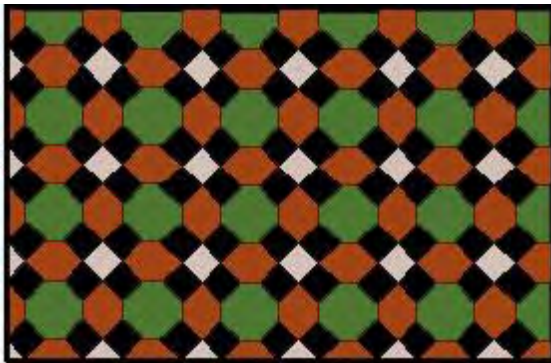
In this activity you will study geometric shapes in symmetrical patterns and design your own pattern.

Information sheet

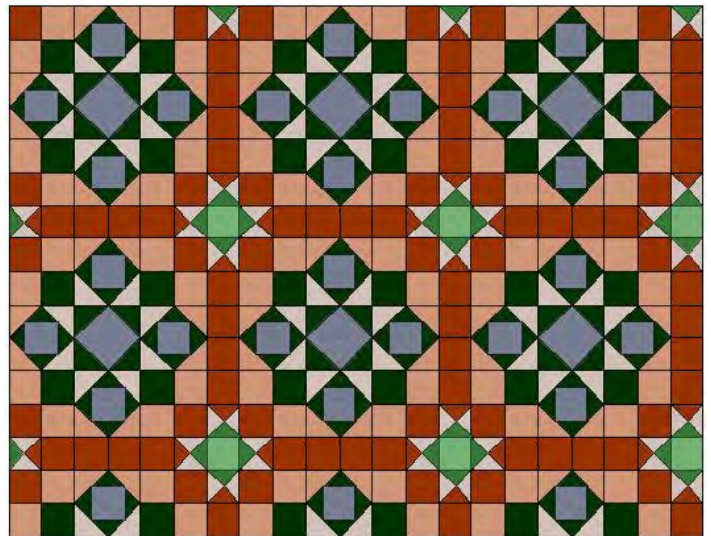
Designers often use tessellations of geometric shapes to create patterns which are pleasing to the eye.

Here are two examples of Victorian floor tiling patterns.

Pattern 1



Pattern 2



To answer

- 1 List below the geometric shapes you can see in each pattern.

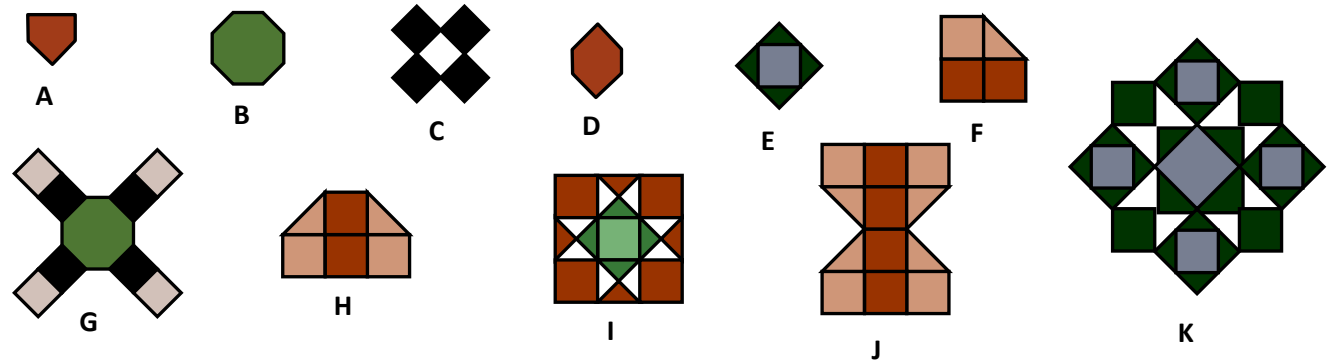
Pattern 1

Pattern 2

2 Parts of the patterns are shown below. For each part write down:

a the number of lines of symmetry

b the order of rotational symmetry



Part	A	B	C	D	E	F
Number of lines of symmetry						
Order of rotational symmetry						

Part	G	H	I	J	K
Number of lines of symmetry					
Order of rotational symmetry					

3 Find other examples of tiling patterns.

Describe the shapes and symmetries used.

4 Create a pattern by tessellating geometrical shapes.

List the shapes used. Say how you think your pattern could be used, such as floor covering, wallpaper, fabric, and wrapping paper.

At the end of the activity

Which types of symmetry occur most often in tessellations?

What effect does the symmetry have on the appearance of the pattern?

Some shapes or combination of shapes tessellate and others do not.

Why is this?