

## Patterns in Shapes

A shape pattern is a repeated arrangement of shapes or figures that follow a specific rule. These patterns can be found in everyday objects, designs, and even nature.

### Types of Shape Patterns

#### 1. Repeating Shape Patterns

A pattern in which a set of shapes is repeated again and again.

**Example:**



**Rule:** The pattern repeats every two shapes (Circle → Triangle).



**Rule:** The pattern follows 2 blue, 2 red, 2 green, then repeats.

#### 2. Shrinking Shape Patterns

A pattern where the size or number of shapes decreases at each step.

**Example:**



**Rule:** The number of blue diamond's decreases by one in each step.



**Rule:** The number of squares decreases by one in each step.

#### 3. Rotational Shape Patterns

A pattern that is repeated by rotating a shape in a specific direction.

**Example:**



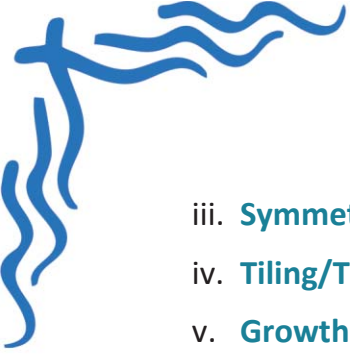
**Rule:** The triangle rotates clockwise in each step.



**Rule:** The square and diamond rotate alternately.

### Properties of Shape Patterns

- Repetition:** Shapes follow a repeated order.
- Transformation:** Shapes can change in size, position, or direction.



- iii. **Symmetry:** Some patterns show mirror-like reflections.
- iv. **Tiling/Tessellation:** Some patterns cover an area without leaving gaps.
- v. **Growth:** Some patterns increase in number or size in a stepwise manner.