# **Reflecting Shapes (Symmetry)**

#### **Understanding Notes**

- A shape is said to have symmetry if it can be folded into two equal halves
- The line which divides the shape into two equal parts is called the line of symmetry
- Both parts look like mirror images of each other
- A shape can have one or more lines of symmetry
- Symmetrical shapes look the same on both sides when folded along the line of symmetry
- Common symmetrical shapes include triangle, square, rectangle etc.



# Example: (Easy – Symmetry in square)

- A square can be folded into two equal halves in many ways
- It has 4 lines of symmetry
- Each part looks exactly like the other

**Answer** = Square has symmetry

# **Example: (Easy – Symmetry in letter)**

- The letter A has a vertical line of symmetry
- If you fold it in half from top to bottom, both parts match

**Answer** = A has symmetry

## Example: (Moderate – No symmetry)

- The letter F cannot be divided into two equal mirror parts
- No matter how you fold it, the halves do not match

**Answer** = F has no symmetry

## Example: (Moderate – Shape with one line of symmetry)

- A triangle with equal sides (equilateral triangle) has one vertical line of symmetry
- Both parts look the same

**Answer** = Triangle has 1 line of symmetry

### **Example: (Moderate – Drawing symmetry)**

- Draw half of a heart shape
- Now reflect it on the other side to complete the shape
- Both halves form a full symmetrical heart

**Answer** = Completed symmetrical figure

#### **Summary Points**

- Symmetry means two equal mirror-like parts
- The line that divides a shape into two equal parts is called the line of symmetry
- Symmetrical shapes can have one or more lines of symmetry
- Some letters and shapes show symmetry while others do not
- Folding, cutting, or drawing can help us understand symmetry better