# Introduction of Symmetry

A. Choose the correct answer:		
1. A figure is said to be symme	trical if	
a) it has more than four sides	b) both halves match exactly when folded	
c) all sides are equal	d) it has no straight lines	
2. Which of the following shapes has more than one line of symmetry?		
a) Square	b) Scalene triangle	
c) Rectangle	d) Parallelogram	
3. A line that divides a figure into two equal halves is called		
a) perpendicular bisector	b) diagonal	
c) line of symmetry	d) radius	
4. The number of lines of symmetry in a regular hexagon is		
a) 3	b) 4	
c) 5	d) 6	
5. Which of the following letters has horizontal symmetry only?		
a) B	b) H	
c) A	d) E	
B. Which figures are symmetric	?	
A.		
в.		
c.		



## C. Write the Missing Terms to Complete the Sentences:

- 1. A figure that can be folded along a line so that both halves match exactly is said to have \_\_\_\_\_.
- 2. The line which divides a figure into two identical parts is called the \_\_\_\_\_\_.
- 3. A regular pentagon has \_\_\_\_\_ lines of symmetry.
- 4. The letter 'M' has \_\_\_\_\_ line of symmetry.
- 5. Symmetry in a figure shows its \_\_\_\_\_\_.



## E. Mark each sentence with a True ( $\checkmark$ ) or False (X):

1. All regular polygons have only one line of symmetry.	
2. A circle has an infinite number of lines of symmetry.	
3. The letter 'T' has both horizontal and vertical symmetry.	
4. A square has more lines of symmetry than a rectangle.	
5. An equilateral triangle has three lines of symmetry.	

#### F. Figure out the answers to these questions:

- 1. Name any four letters of the English alphabet that have vertical lines of symmetry.
- 2. Draw a figure that has exactly one line of symmetry and explain why.
- 3. Which of the following figures have no line of symmetry: scalene triangle, circle, square, parallelogram.
- 4. How many lines of symmetry does a rectangle have? Show them with a sketch.
- 5. Can a shape have more than two lines of symmetry? Give an example and explain.

#### G. Challenge yourself with these questions:

- 1. Identify and draw any three objects from daily life that show symmetry.
- 2. Check whether the given shape is symmetrical. If yes, draw its line of symmetry.
- 3. List the number of lines of symmetry in a triangle, square, and hexagon.
- 4. Name three symmetrical geometrical shapes and describe their symmetry
- 5. Fold a paper in different ways to find how many lines of symmetry a circle has.