# INDIAN SCHOOL AL WADI AL KABIR 

DEPARTMENT OF MATHEMATICS (2021-2022)
TOPIC: SYMMETRY, PATTERNS AND NETS
RESOURCE PERSON: Ms. Bandana Thakur
NAME: $\qquad$ CLASS: SEC: $\qquad$ DATE: $\qquad$

## I. Fill in the blanks with the correct answer.

1) The line along which a shape can be folded into two exact halves, is called the
2) If a figure can be cut into two halves, so that the first half is the exact reflection of the second, then the figure is called a $\qquad$ figure.
3) A square has $\qquad$ lines of symmetry.
4) The unfolded flat shape of a solid is called the $\qquad$ of the solid.
5) $\qquad$ shapes have reflection symmetry.
6) A shape with zero or no line of symmetry is called $\qquad$ shape.
II. Read the questions carefully and Tick $(\sqrt{ })$ the correct answer.
7) A door is a solid. Which solid shape is it?
(a) cube
(b) cuboid
(c) cone
(d) cylinder
8) Observe the picture given below and select the correct option.

(a) $A B$ is the line of symmetry for the given figure.
(b) CD is the line of symmetry for the given figure.
(c) Both $A B$ and $C D$ are the lines of symmetry.
(d) Neither $A B$ nor $C D$ is the line of symmetry.
9) Observe the pattern and select the correct option.

10) Which of the given shapes is symmetrical?
(a)

(b)
II
(c)

(d) $5 \square$
11) Which of the following shapes does not have a line of symmetry?

(a) Only P
(b) Only Q
(c) Both R and S
(d) Both P and Q
12) What comes next in the pattern?

(a) O
(b) P
(c) N
(d) M
13) Observe the pattern and select the shape that will come next?

(a)

(b)

(c)

(d)

14) Replace the Question mark with the most appropriate option.

ORANGE $\rightarrow$ RANG $\rightarrow$ ?
(a) ANG
(b) AN
(c) RAN
(d) NG
9) Observe the pattern given below and select the figure that comes next.

(a)

(b)

(c)

(d)

10) Observe the pattern given below. If the pattern continues, how many orange and green squares will be needed for Figure 6?

Figure 1

Figure 2

Figure 3
(a) 16 orange squares and 8 green squares
(b) 25 orange squares and 10 green squares
(c) 36 orange squares and 12 green squares
(d) 49 orange squares and 14 green squares
11) The patterns given below have been created by turning the shapes to either quarter turn or half turn. Identify the types of turns and draw the figure that will come next.
(a)


$\qquad$
(b)

(c)

(d)

(e)


