

## 1

# Shapes Around Us

## Model of India Gate

**Q1: What parts of the building have you shown in your model?**

Ans: Roof, pillars, and base.

**Q2: Why did you select these parts?**

Ans: Because these are the main parts that show the shape and structure of the building.

**Q3: What shapes will model these parts well?**

Ans: Cubes, cuboids, and cylinders.

**Q4: How is your model similar to the real building?**

Ans: It has the same basic shape and important parts like the pillars and the arch.

**Q5: How is it different from the real building?**

Ans: It is smaller, simpler, and made with blocks, not real materials.



## Prisms and Pyramids

**Q. What shape of face is common to all the prisms?**

Ans. In prisms rectangular shape is common.

**Q. What other shapes do these prisms have?**

Ans. Other shapes we see are triangle, square and hexagon.

**Q. How many such faces each?**

Ans. Two faces each of other shapes

**Q. What shape of face is common to all the pyramids?**

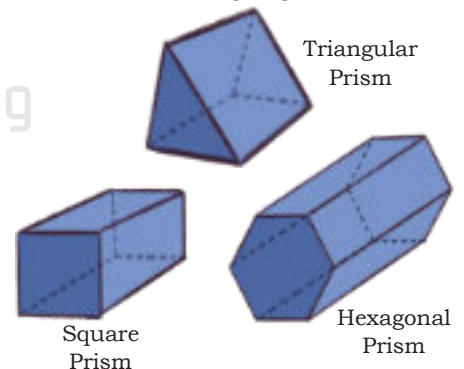
Ans. In pyramids, triangle shape is common.

**Q. All the triangular faces meet at common point.**

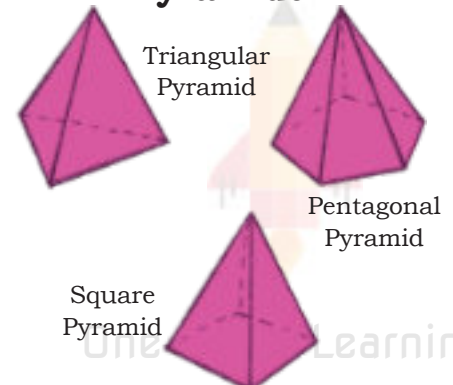
**Q. Identify any other shape in each of the pyramids**

Ans. Other shapes we see are square and pentagon.

### Prisms



### Pyramids



**Q. Is a cube also a prism?**

Ans. Yes, it is a special kind of prism with all faces as squares.

**Q. What is the difference between a prism and a pyramid?**

Ans. A prism has two same faces on top and bottom, while a pyramid has only one base and all sides meet at a point.

## Cube and Die Observations

Q1: Take a die. Look at the face that has number 1. The face numbered 6 is opposite to the face numbered 1. What is the face opposite to

(a) face numbered 2? **Ans. 5**

(b) face numbered 3? **Ans. 4**

(c) face numbered 4? **Ans. 3**



Q2: Which faces have common edges with face numbered 1?

Ans. 2, 3, 4, 5.

Q3: Which face has no common edge with face numbered 1?

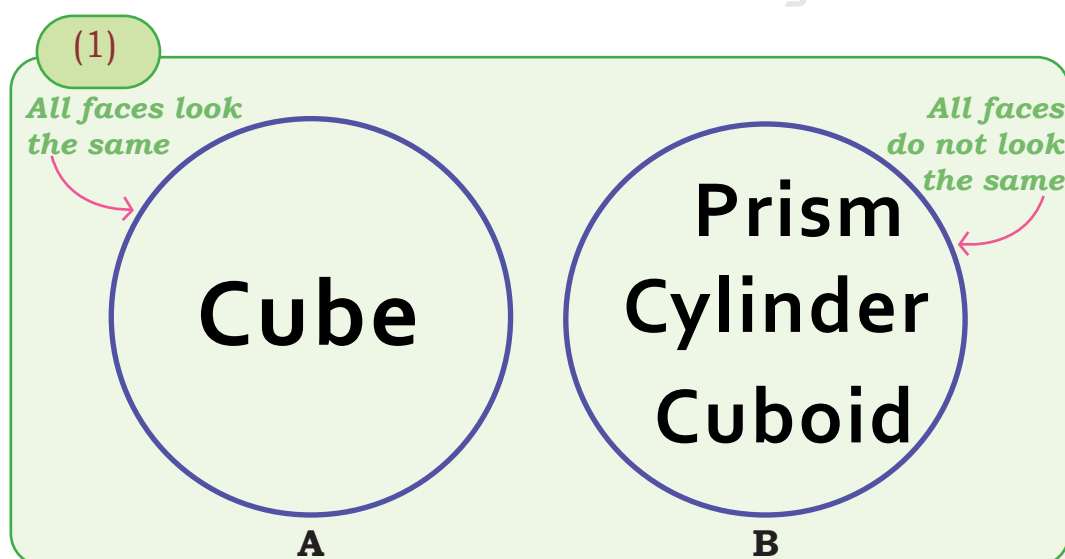
Ans. 6.

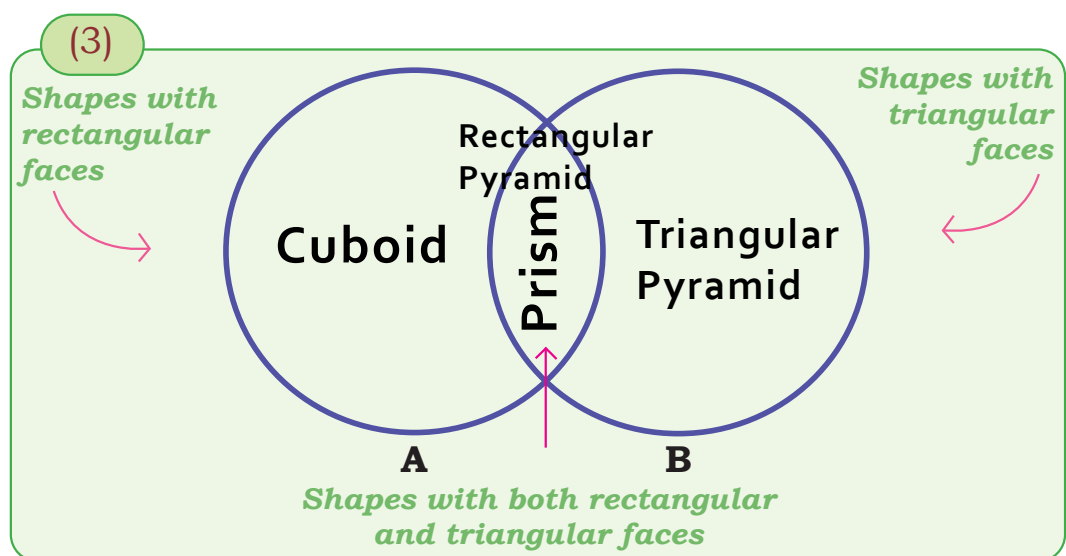
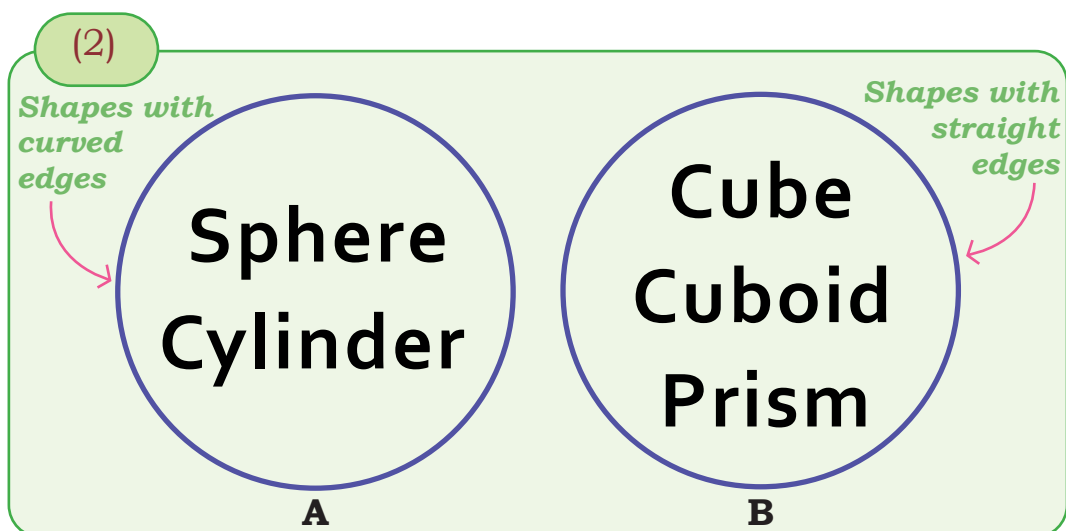
Q4: What color is opposite to

(a) Red face? **Ans. Purple**

(b) Yellow face? **Ans. Green**

## Sorting 3D shapes





Q1. Match the pictures to the descriptions and name the shapes.

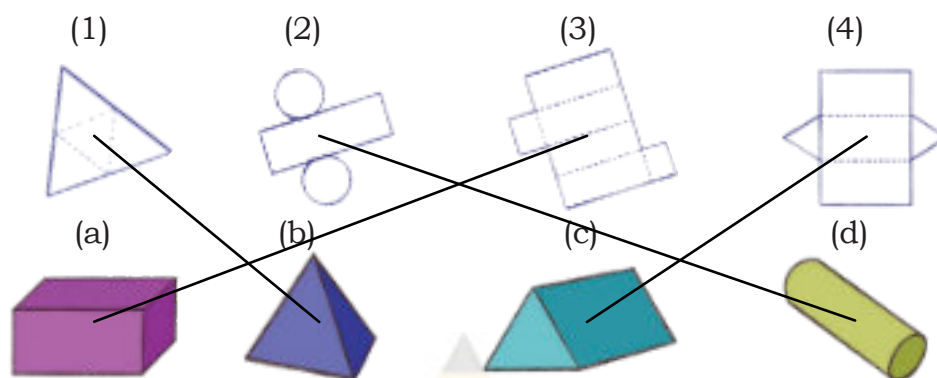
- a) I have 5 faces and 5 corners. I have 8 edges. 1 of my faces is a square and 4 of my faces are triangles **Triangular Pyramid**
- b) I have 1 flat face, 1 curved face, and 1 edge **Cone**
- c) I have 1 curved face. I have no edges or corners **Sphere**
- d) I have 2 flat faces, 1 curved face, and 2 edges. I have no corners **Cylinder**
- e) I have 5 faces, 6 corners, and 9 edges, and 2 of my faces are triangles **Triangular Prism**
- f) I have 6 faces, 12 edges, and 8 corners **Cube**

**Q2. Each one is different. How? Discuss.**

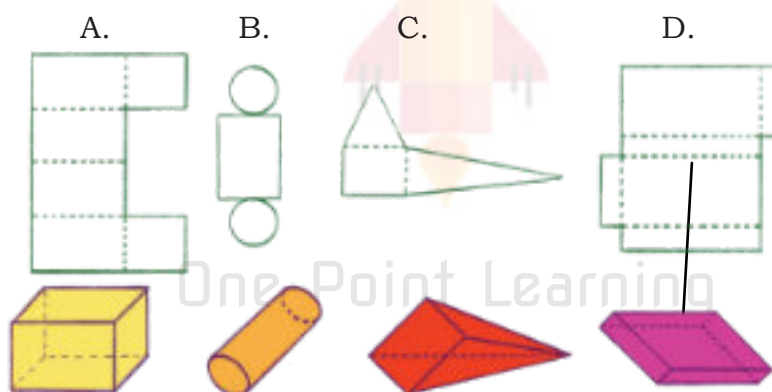


Ans. Each shapes are different from each other based on their sides, edges, and corners.

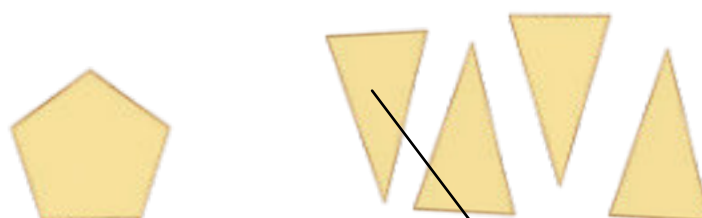
**Q3. Match the following nets to the appropriate solids given below.**



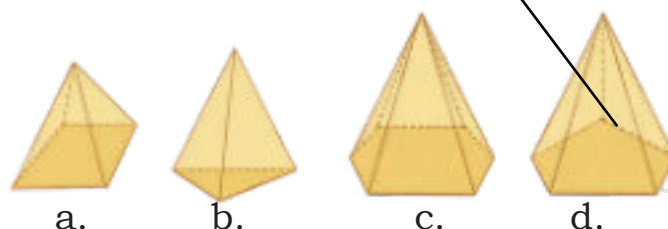
**Q4. Which of these nets can be folded to make a solid of the kind given below?**



**Q5. Nitesh cuts up a net on the folds. Here are its pieces.**



Which solid has the above pieces in its net?



## When Lines Meet - Angles

1. Mark the angles in the following pictures.

a)



b)



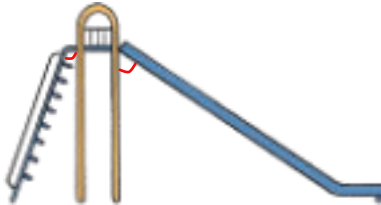
c)



d)



e)



2. Where do you see angles in the classroom? Give a few examples.

Ans. Door corners, window corners, blackboard edges.

Q. Write the names of objects where you find right angles.

Ans. Book, window frame, cupboard, scale.

Q. Name some objects from your classroom which have an acute angle.

Ans. Clock hands at 10:10, scissors.

Q. Name some objects from your classroom which have an obtuse angle.

Ans. Open door, leaning chair

Q. Identify all angles in the following letters.



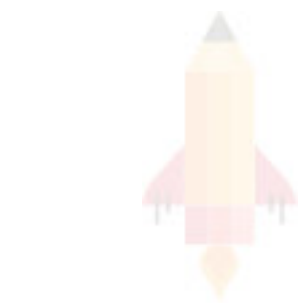
Acute Angle



Acute and Obtuse Angles



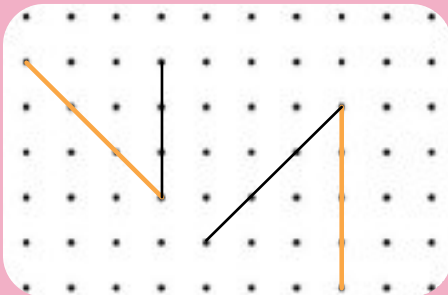
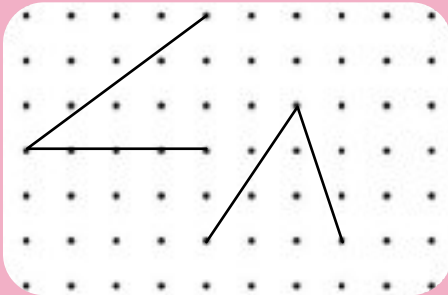
Acute Angles



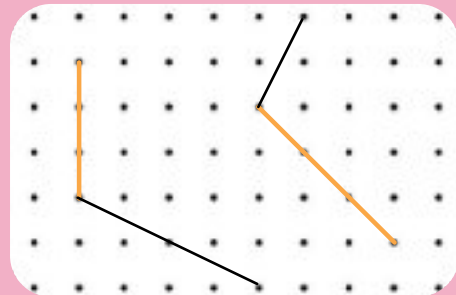
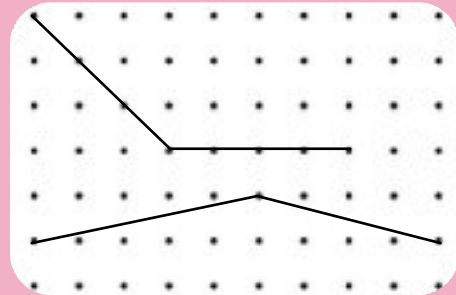
**Let us Do**

Q1.

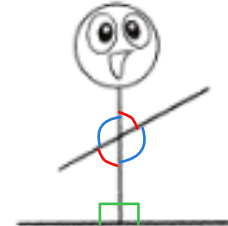
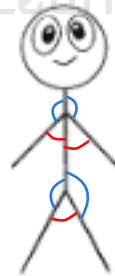
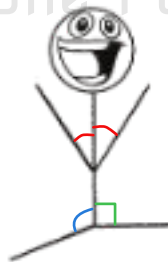
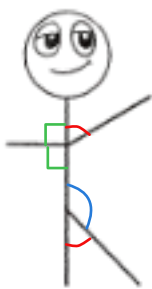
Draw some acute angles on the top grid. Draw a line to make an acute angle using each given line in the bottom grid.



Draw some obtuse angles on the top grid. Draw a line to make an obtuse angle using each given line in the bottom grid.



Q2. In the figures given below, mark the acute angles in red, right angles in green, and obtuse angles in blue.



Scan to Download Free Worksheets



One Point Learning