पुना International School
Shree Swaminarayan Gurukul, Zundal

Class -V
MATH-MAGIC
Year- 2020-21

Ch-2 Shapes and angles

>>**Summary:**

- Introduction
- Fill in the blanks.
- Identify the angles as right angle, acute angle, obtuse angle or straight angle.
- Count the number of angles in the given figure.
- Draw angle using protractor
- Activity

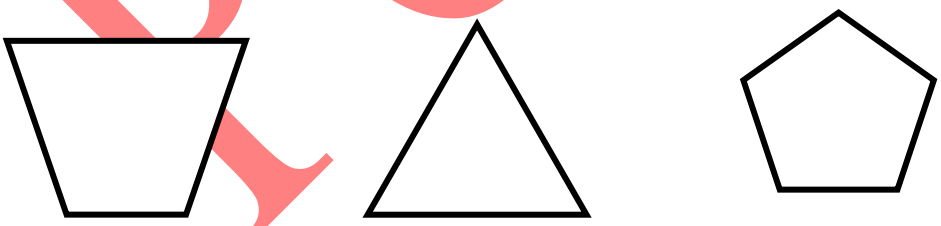
❖ Introduction :

- A Point has no shape or size.
- A line segment AB, has two end points, A and B. It's length can be measured .
- A ray has only one end point.
- A line may be extended in both directions.
- An angle which measures more than 180° is called a reflex angle.
- Perpendicular lines form a right angle between them.

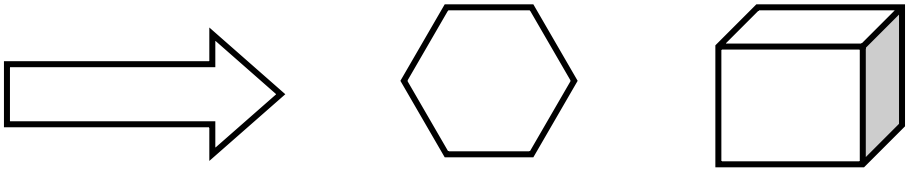
➢ **Define open figure:** An open shape is made up of line segments, but there is at least one line segment that isn't connected to anything at one of its endpoints.

➢ **Define closed figure:** If a shape is enclosed from all the sides' end-to-end and form a figure with no openings is called a closed shape.

➢ **Different types of shapes (Activity : Cut different shapes and paste it in notebook)**



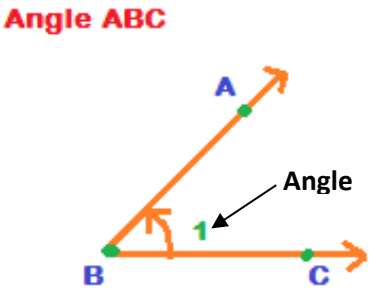
Quadrilateral Triangle Pentagon



Arrow Hexagon Cube

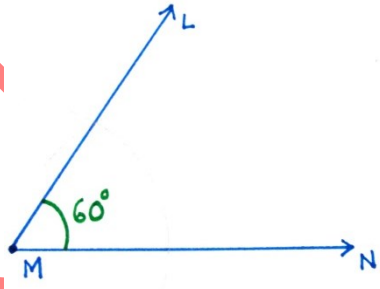
❖ Define : Angle

- An angle is a figure formed by two rays meeting at a common end point



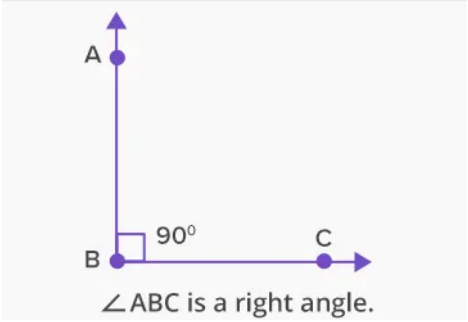
❖ **Types of angles :**

- There are six types of angle.
  1. Acute angle
  2. Right angle
  3. Obtuse angle
  4. Straight angle
  5. Reflex angle
  6. Complete angle
- **Define :**
  1. Acute angle: An angle whose measure is less than 90˚ is known as acute angle.
     For example: 60˚

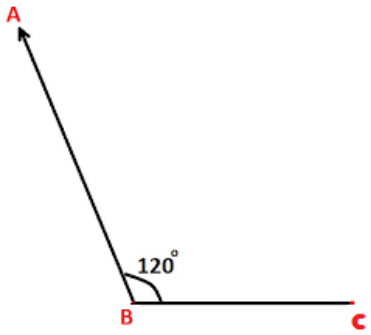


L LMN or *L*NML is an acute angle.

  2. Right angle: An angle whose measure is exactly 90˚ is known as right angle.

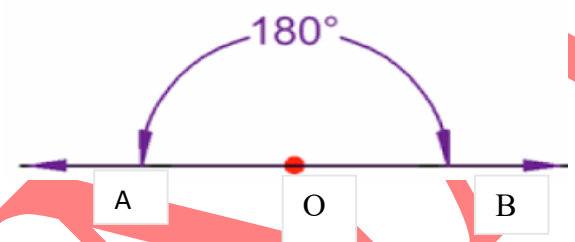


  3. Obtuse angle: An angle whose measure is more than 90˚ is known as obtuse angle.
     For example: 120˚



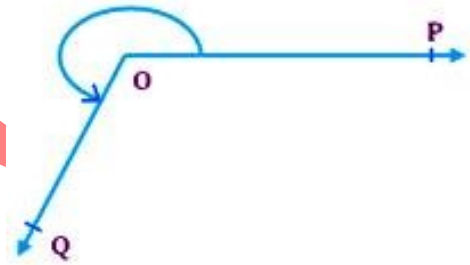
*L*ABC is an obtuse angle.

4. Straight angle: An angle whose measure is exactly 180˚ is known as straight angle.



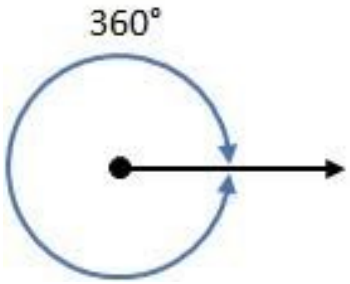
*L*AOB is a straight angle.

5. Reflex angle: An angle whose measure is more than 180˚ but less than 360˚ is known as reflex angle.
For example: 240˚ **240˚**



*L*POQ is a reflex angle.

6. Complete angle: an angle whose measure 360˚ is known as complete angle.



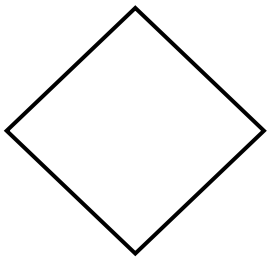
❖ **Fill in the blanks.**

1) The unit for measuring angle is **degree**.
2) A right-angle measure **90˚**
3) A zero angle measures **0˚**
4) A complete angle measure **360˚**
5) An obtuse angle measure more than **90˚** and less than **180˚**
6) An angle measuring **180˚** is called a straight angle.
7) An angle measuring more than 180˚ but less than **360˚** is called reflex angle.
8) We use **protractor** to measure angles.
9) **One third** of a right angle = 30˚
10) **Two times** of a right angle = 180˚

❖ Identify the angles as right angle, acute angle, obtuse angle or straight angle.

1) 45˚ = Acute Angle
2) 165˚ = Obtuse Angle
3) 180˚ = Straight Angle
4) 75˚ = Acute Angle
5) 90˚ = Right Angle
6) 35˚ = Acute Angle
7) 240˚ = Reflex Angle
8) 360˚ = Complete Angle

❖ **Count the number of angles in the given figure:**



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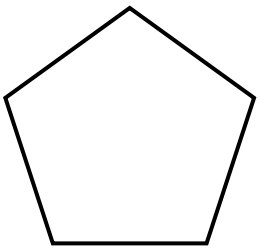

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❖ **Draw angle using protractor:**

1) 75˚ 2) 45˚ 3) 160˚ 4) 90˚ 5) 135˚

- **Activity: Make angle tester see page no. 20 and Angle cut out from textbook page no.-201**