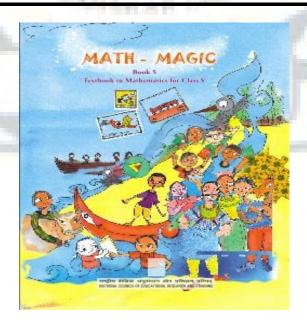


Class -V

Mathematics Explaination & Exercise Corner Year- 2020-21



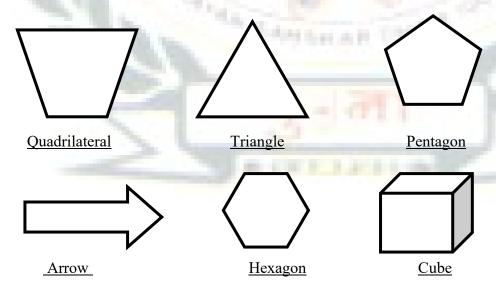
Ch-2 Shapes and angles

>><u>Summary:</u>

- 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:

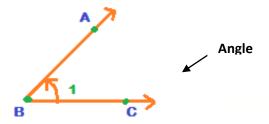
- A Point has no shape or size.
- A line segment AB, has two end points, A and B. It's length can be measured.
- A ray has only one end point.
- A line may be extended in both directions.
- An angle which measures more than 180° is called a reflex angle.
- Perpendicular lines form a right angle between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



❖ Define : Angle

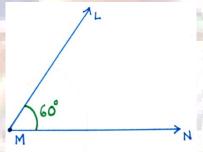
• An angle is a figure formed by two rays meeting at a common end point

Angle ABC



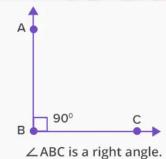
❖ Types of angles :

- 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 LNML is an acute angle.

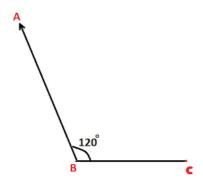
2. Right angle: An angle whose measure is exactly 90° is known as right angle.



3. Obtuse ∠ABC is a right at than 90° is known as obtuse angle.

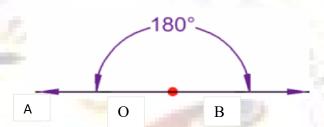
For example: 120°

angle: An angle whose measure is more



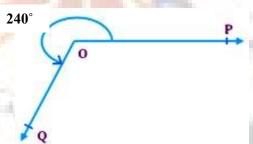
LABC is an obtuse angle.

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



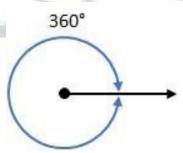
LAOB is a straight angle.

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



LPOQ is a reflex angle.

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

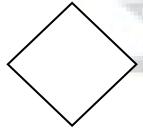


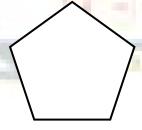
***** EXERCISE CORNERS

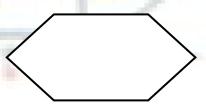
Fill in the blanks.

- 1) The unit for measuring angle is **degree**.
- 2) A right angle measures 90°
- 3) A zero angle measures $\underline{\mathbf{0}}^{\circ}$
- 4) A complete angle measures <u>360°</u>
- 5) An obtuse angle measures 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) $165^{\circ} = Obtuse Angle$
 - 3) 180° = Straight Angle
 - 4) $75^{\circ} = Acute Angle$
 - 5) 90° = Right Angle
 - 6) 35° = Acute Angle
 - 7) $240^{\circ} = \text{Reflex Angle}$
 - 8) $360^{\circ} = Complete Angle$

Count the number of angles in the given figure:







4

<u> 5</u>

6

Draw angle using protractor: For more detail (https://www.youtube.com/watch?v=Gzd lsNwTOI) 1) 75° 2) 45° 3) 160° 4) 90° ❖ Activity: Make angle tester see page no. 20 and Angle cut out from textbook page no.-201 SHAR DANSE