Introduction to Angles

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An angle is formed when two rays meet at a common point.

The two rays are called arms of the angle.

The common point where they meet is called the vertex.

> **Example:**
> - The hands of a clock form an angle at different times.
> - The corners of a book form angles.

Naming an Angle

- An angle is usually named using three capital letters.
- The middle letter represents the vertex.

Example: ∠ABC, where B is the vertex.

Types of Angles
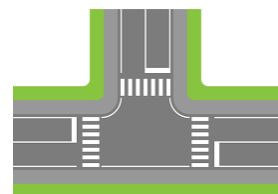
1. Acute Angle

An angle less than 90°.

> **Example:** The letter 'V', a pizza slice.

2. Right Angle

An angle exactly 90°.

> **Example:** A square's corner, a T-junction in a road.

3. Obtuse Angle

An angle more than 90° but less than 180°.

> **Example:** The roof of a hut, an open book.

4. Straight Angle

An angle exactly 180° (a straight line).

> **Example:** A ruler lying flat.

5. Reflex Angle

An angle more than 180° but less than 360°.

> **Example:** The hands of a clock at 10:10.

6. Complete Angle

An angle exactly 360° (full circle).

Example: The second hand of a clock moving one full round.

Properties of Angles

i.   An angle is measured in degrees (°).

ii. A right angle is always 90°.

iii. A straight angle is always 180°.

iv. The sum of angles around a point is 360°.

v.   If two angles are equal, they are called congruent angles.

vi. Vertically opposite angles are always equal.