**CLASS VI UNIT 14 PRACTICAL GEOMETRY**

**GIST of the LESSON**

* **CONSTRUCTION OF A CIRCLE .**

Centre of a circle ,Radius of a circle .Diameter of a circle .

* **CONSTRUCTION OF A LINE SEGMENT .**

A line segment is bounded by two end points .

Accurate measurement of given length using ruler .

Constructing a copy of a given line segment .

* **PERPENDICULARS .**

TWO lines are said be perpendicular if they intersect such that the angles formed between them are right angles .

* **ANGLES**

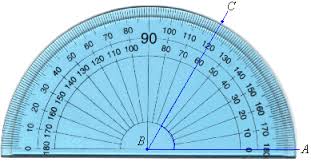
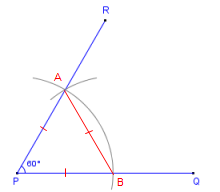
Constructing an angle of a given measure .

Angles of special measure .

**Activity**

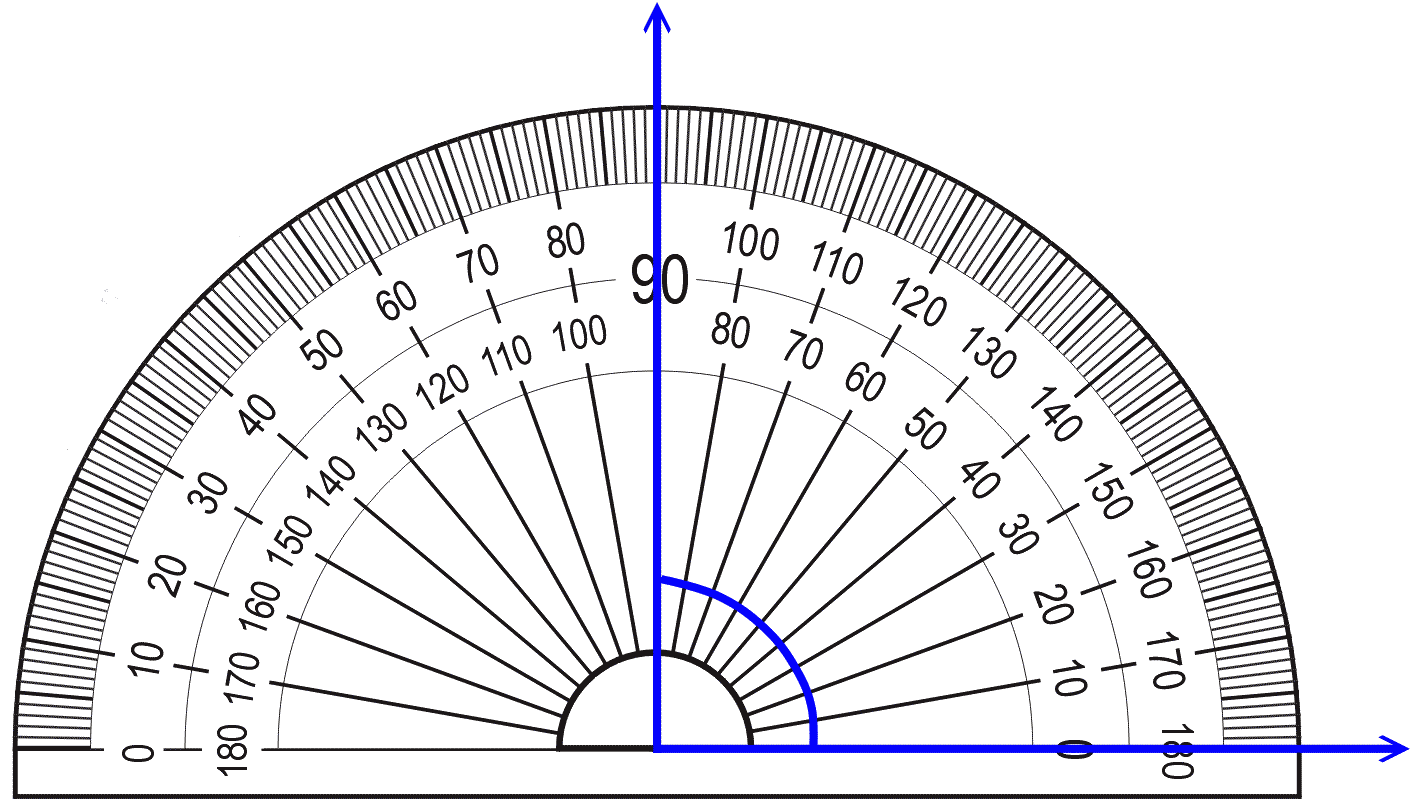
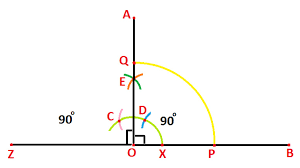
**Do you always need protractor to construct angles ?**

**Angle of 600**

Using Protractor Using ruler and Compass

**Angle of 600**

Using Protractor Using ruler and Compasses

Similarly other special angles can be constructed using both the methods and thus simultaneously verified.

measure .

**LEVEL 1**

Q 1 Draw a circle of radius 4 cm .

Q 2 With the same centre O .draw two circles of radii 6 cm and 3.5 cm.

Q 3 Draw a line segment of length 6.5 cm using a ruler .

**LEVEL 2**

Q 1 Construct a line segment of length 7.4 cm using ruler and compasses.

Q 2 Construct AB of length 8.4 cm. From this ,cut off AC of length 4.3 cm .Measure BC.

Q 3 Draw a line l and a point X on it .Through X ,draw a line segment XY perpendicular to l .

Q 4 Draw AB of length 7.3 cm and find its axis of symmetry .

**LEVEL 3**

Q 1 Draw a right angle and construct its bisector.

Q 2 Construct with ruler and compasses,angles of following measures .

1. 600 (b) 300 (c) 900 (d) 1200 (e) 450 (f) 1350

Q 3 Draw ∠POQ of measure 600 and find its line of symmetry

Q 4 Draw an angle measure 1600 and divide it into four equal parts .

Q 5. Draw a line segment of length 9.5 cm and construct its perpendicular bisector.

Q6 With XY of length 6.4 cm as diameter, draw a circle.

**WORK SHEET**

Q 1 Draw a circle of radius 4 cm.

Q 2 Draw a right angle and construct its bisector.

Q 3 Construct a line segment of length 7.2 cm using ruler and compasses .

Q 4 Construct with ruler and compasses, angles of following measures .

1. 600 (b) 300 (c) 900 (d) 1200 (e) 450 (f) 1350

Q5 With XY of length 6.8 cm as diameter, draw a circle.