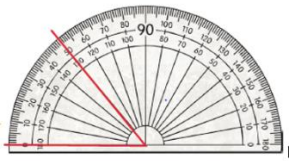
Drawing and Measuring Angles Knowledge Organiser



Key Vocabulary
angle
right angle
acute
obtuse
reflex
protractor
horizontal
vertical
vertex
arm
arc
scale
degrees
rotation

Types of angle



Acute Angles
Any angle that measures less than 90° is called an **acute** angle.

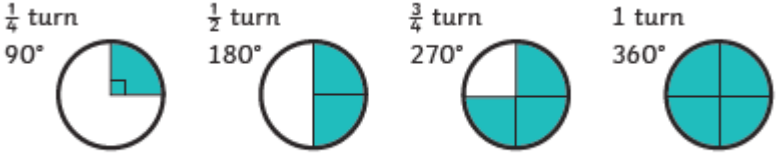


Obtuse Angles
Any angle that measures greater than 90° and less than 180° is called an **obtuse** angle.



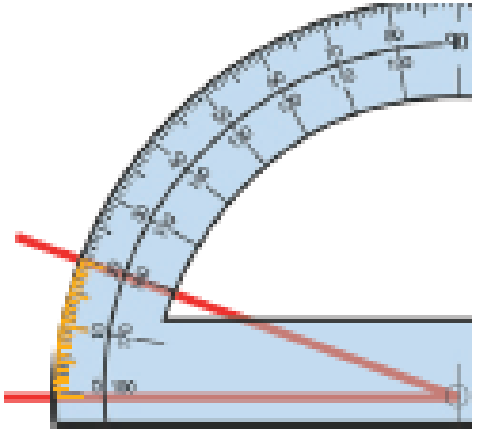
Reflex Angles
Any angle that measures greater than 180° is called a **reflex** angle.

Descriptions of turn



Multiples of 90° can be used as descriptions of a turn.

Using a protractor



Measure angles using a protractor

1. Place the **circle or cross** at the centre of the protractor carefully on the **point** (vertex) of the angle.
2. Make sure you also line the horizontal arm of the angle up with the 0° marker.
3. Think about which direction the arm of the angle is moving, because the scale on a protractor reads from both **Left to Right** and from **Right to Left**. Position protractor to read from **left to right**.
4. **Count the degrees carefully**. Each degree is marked. Multiples of 5° are marked by a medium line, and multiples of 10° are marked by a longer line.
5. **Be careful** to keep the horizontal line of the angle lined up with the protractor.

Draw angles using a protractor.

1. Draw a straight, horizontal line (i.e. an arm of the angle).
2. Place a dot at one end of the arm. This dot represents the vertex of the angle.
3. Place the centre of the protractor at the vertex dot and the baseline of the protractor along the arm of the angle.
4. Find the required angle on the scale and then mark a small dot at the edge of the protractor.
5. Join the small dot to the vertex with a ruler to form the second arm of the angle.
6. Draw the arc of the angle you have drawn and write a label remembering the degree sign °.