

Name: \_\_\_\_\_

Back to the roots...



## BASICS ABOUT TRIANGLES – everything you should already know...

### What is a triangle?

A triangle is one of the basic shapes of geometry. It is a **3-sided polygon**. Every triangle has **3 sides** and **3 angles**. The 3 angles always add to  $180^\circ$ .

### TYPES OF TRIANGLES:

**Equilateral, Isosceles and Scalene:** We distinguish three special names given to triangles that tell how many sides (or angles) are equal.

- **Equilateral Triangle:** 3 equal sides and 3 equal angles (always  $60^\circ$ )
- **Isosceles Triangle:** 2 equal sides and 2 equal angles
- **Scalene Triangle:** no equal sides and no equal angles

**Acute, Right and Obtuse:** Triangles can also have names that tell you what type of angle is inside.

- **Acute Triangle:** all angles are less than  $90^\circ$
- **Right Triangle:** has a right angle ( $90^\circ$ )
- **Obtuse Triangle:** has an angle more than  $90^\circ$

**Exercise:** Draw a triangle of each type in your portfolio!

### Right Triangle

A right-angled triangle (the right angle is shown by the little box in the corner) has names for each side:

- **Adjacent** is adjacent to the angle,
- **Opposite** is opposite the angle, and
- the longest side is the **Hypotenuse**.

