Triangles

Since triangles are made up of sides and angles, we can classify them in two ways.

By Angles:
ALL TRIANGLES HAVE TWO ACUTE ANGLES. It's the size of the final angle that gives the triangle its name. The three categories are:
Acute – All three angles are less than 90˚ each.
Right – One of the angles is 90˚.
Obtuse – One of the angles is greater than 90˚.

By Sides:
The sides of a triangle do not have a total measure like the angles do, but the sides do have a relationship. We classify triangle based on this relationship. The categories are:
Scalene: All three sides are different lengths (no congruence!)
Isosceles: At least two sides are congruent.
Equilateral (or Equiangular): All three sides (and thus all 3 angles) are congruent. (Notice that "Equilateral" triangles would therefore be a subset of "Isosceles.")

We can combine the classifications, since the two sets of classifications are almost independent of one another.
If a triangle has angles of 50˚, 60˚, and 70˚, it would be Acute Scalene (or Scalene Acute). The three angles, and therefore the three sides, are different sizes (scalene) and all three angles are less than 90˚ (acute). The order of the two classifications does not matter, although some people say one way rolls off the tongue more easily.

Similarly, we can make all of the following combinations:
Acute Scalene (Scalene Acute)
Acute Isosceles (Isosceles Acute)
Right Scalene (Scalene Right)
Right Isosceles (Isosceles Right) – This is one of the most important triangles in Geometry.
Obtuse Scalene (Scalene Obtuse)
Obtuse Isosceles (Isosceles Obtuse), and…
Equilateral (or Equiangular) – We don't need an angle term here since each of the angles would be 60˚ and therefore acute.

If we illustrate the classifications using Venn Diagrams, they would look like this: