

What's a polygon? What's the difference between a regular and irregular polygon?

Angles in a regular polygon: $\theta = \frac{(n-2)180}{n}$

Pick a point to call your "center." Construct a regular triangle, square, pentagon etc. around this center, each in a different color. The altitude of the triangle should have the same length as the diagonal of the square (and the other shapes should be made accordingly.) See what begins to form!