## **Exploring Polygons**

A regular polygon is a polygon that has equal angles. Some regular polygons are shown below. Name them based on the number of sides they have.



The table to the right has information on the sum of the interior angles for different polygons. What do you notice? Are there any patterns you see?

What will be the sum of the interior angles of a polygon that has 24 sides? Be prepared to show how your group determined your answer.

Number of Sides in the Polygon	Sum of the Interior Angles
3	180°
4	360°
5	540°
6	720°
7	900°
8	1080°

2 How many sides will a polygon have that has an interior angle sum of 2700°? Be prepared to show how your group determined your answer.