



# Family Letter for Unit 5

Dear Family,

During the next few weeks, our math class will be learning about the geometry, congruence, and construction of plane figures. We will be studying lines, angles, circles, and polygons.

You can expect to see work that provides practice in finding sums of angles in polygons. You may wish to use this information as a guide to help your child.

## Vocabulary

**complementary angles** Two angles for which the sum of the angle measures is  $90^\circ$ .

**diagonal** A line segment that joins two vertices of a polygon and is not a side.

**supplementary angles** Two angles for which the sum of the angle measures is  $180^\circ$ .

**vertex** The point where two sides of a figure meet.

### Using Angle Sums

The sum of the angle measures of a triangle is  $180^\circ$ .

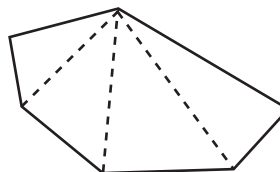
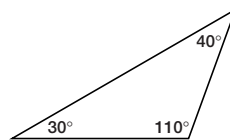
You can use what you know about the sum of the angle measures of a triangle to find the sum of the angles of other regular polygons.

1. Draw all the diagonals from one vertex to all other vertices of the figure.
2. Count the number of triangles.
3. Multiply the number of triangles in the figure by  $180^\circ$  to find the sum of the angles in the figure.

Hexagon  
(6-sided figure)

1. Draw diagonals.
2. 4 triangles
3.  $4 \times 180 = 720$

The sum of the angle measures of a hexagon is  $720^\circ$ .



Help your child develop geometric awareness by discussing various shapes that can be seen every day.

Sincerely,



### Technology

Check out *Education Place* at [eduplace.com/kids/mw/](http://eduplace.com/kids/mw/) for e•Glossary, e•Word Games, test prep practice, and more.