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.

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

Sincerely,

Vocabulary

complementary angles  Two angles for which the sum of the angle measures is 90°.
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°.
vertex  The point where two sides of a figure meet.

Using Angle Sums

The sum of the angle measures of a triangle is 180°.

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° 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°.

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Sincerely,

Technology

Check out Education Place at eduplace.com/kids/mw/ for e•Glossary, e•Word Games, test prep practice, and more.