Instructional Flow – Unit 3 Polygons

3.1 Symmetry in Polygons

- equilateral, equiangular, and regular polygons
 - reflectional and rotational symmetry

3.2 **Properties of Quadrilaterals**

- special quadrilaterals
- inheritance of properties

3.3 Parallel Lines and Transversals

• special angle relationships for two parallel lines cut by a transversal

3.4 **Proving That Lines are Parallel**

• two-column and paragraph proof

3.5 The Triangle Sum Theorem

- the Parallel Postulate
- proof and application of the Triangle Sum Theorem

11.5 Euclid Unparalleled (Optional Enrichment)

• non-Euclidean geometries: spherical and hyperbolic

IG Relationships Between Angles and Sides of a Triangle

• relationship between the order of magnitude of lengths of the sides and the order of magnitude of the measures of the angles

3.6 Angles in Polygons

- sum of interior angle measures
- measure of each interior angle of a regular polygon
- sum of exterior angle measures

3.7 Midsegments of Triangles and Trapezoids

• indirect measurement

3.8 Analyzing Polygons Using Coordinates

- slopes of parallel and perpendicular lines
- midpoint formula