Geometric Vocabulary

Shape	Description	Examples
Multiple Closed Curves		
Concave	One or more diagonals of a <i>concave</i> figure are outside the figure.	Concave
Convex	All diagonals of a <i>convex</i> figure are inside the figure.	
Symmetrical	A figure that can be folded so that the two parts match exactly has line, or reflection, symmetry.	Line symmetry
	A figure that coincides with the original figure after it has been rotated less than 360° has rotational symmetry.	Line and rotational symmetry
Asymmetrical	A nonsymmetrical figure has neither line nor rotational symmetry.	No symmetry
Polygons		
Polygons	Polygons are simple closed curves with all straight sides. Regular polygons have all sides and all angles congruent.	

Triangles (classified by properties of sides)		
Equilateral	Equilateral triangles have all sides congruent.	
Isosceles	Isosceles triangles have two sides congruent.	
Scalene	Scalene triangles have no sides congruent.	
Triangles (classified by properties of angles)		
Right	One angle of a <i>right</i> triangle is equal to 90°.	
Acute	All angles of an <i>acute</i> triangle are less than 90°.	
Obtuse	One angle of an <i>obtuse</i> triangle is greater than 90°.	
Quadrilaterals (convex)	A quadrilateral is a polygon with four sides.	

Kite	A <i>kite</i> has two pairs of congruent adjacent sides.	
Trapezoid*	A <i>trapezoid</i> has exactly one pair or parallel sides.	
Isosceles trapezoid	The opposite nonparallel sides of an isosceles trapezoid are congruent.	
Parallelograms	A <i>parallelogram</i> is a quadrilateral with two pairs of parallel sides.	
Rectangle	A <i>rectangle</i> is a parallelogram with four right angles.	
Rhombus	A <i>rhombus</i> is a parallelogram with all sides equal.	
Square	A square is a parallelogram with four right angles and all sides equal.	

^{*}Some authors choose to define *trapezoid* as a quadrilateral with at least one pair of parallel sides. That definition is more inclusive and leads to the conclusion that all parallelograms are trapezoids. The Navigations books adopt the classical definition that a trapezoid is a quadrilateral with exactly one pair of parallel sides.

Prisms	Prisms have two parallel bases that are congruent polygons; the lateral faces are parallelograms formed by segments connecting corresponding vertices of the bases. Prisms are named for the shape of their bases (e.g., triangular prism, square prism, etc.)	
Pyramids	Pyramids have bases that are polygons; the lateral faces are triangles that meet at a common vertex. Pyramids are named for the shape of their bases (e.g., triangular pyramid, square pyramid, etc.).	
Cylinders	Cylinders have curved lateral surfaces joining two parallel bases that are congruent circular regions. Segments connecting corresponding points on the bases are parallel.	
Cones	Cones have curbed lateral surfaces and bases that are circular regions.	