

## Quadrilaterals Graphic Organizer

5.3 Kite and Trapezoid Properties, 5.5 Properties of Parallelograms, 5.6 Properties of Special Quads

Quadrilateral Name	Side Properties	Angle Properties	Diagonals Properties
<p><b>Kite</b> A quadrilateral with two distinct pairs of congruent consecutive sides.</p>	<ul style="list-style-type: none"> <li>In a kite there are two pair of congruent sides</li> </ul>	<ul style="list-style-type: none"> <li>Non-vertex angles are congruent</li> <li>Vertex angles are bisected by a diagonal</li> </ul>	<ul style="list-style-type: none"> <li>Diagonals are <math>\perp</math></li> <li>Diagonal connecting vertex angles is the <math>\perp</math> bisector of the other diagonal</li> </ul>
<p><b>Trapezoid</b> A quadrilateral with exactly one pair of parallel sides.</p>	<ul style="list-style-type: none"> <li>The two parallel sides of the trapezoid are called the bases</li> </ul>	<ul style="list-style-type: none"> <li>The consecutive angles between the bases of the trapezoid are supplementary</li> </ul>	
<p><b>Isosceles Trapezoid</b> A trapezoid with two congruent legs.</p>	<ul style="list-style-type: none"> <li>In an isosceles trapezoid the non-parallel sides are congruent</li> </ul>	<ul style="list-style-type: none"> <li>The bases angles of an isosceles trapezoid are congruent</li> </ul>	<ul style="list-style-type: none"> <li>The diagonal of an isosceles trapezoid are congruent</li> </ul>
<p><b>Parallelogram</b> A quadrilateral with two pairs of parallel sides.</p>	<ul style="list-style-type: none"> <li>Opposite sides are congruent</li> </ul>	<ul style="list-style-type: none"> <li>Opposite angles are congruent</li> <li>Consecutive angles are supplementary</li> </ul>	<ul style="list-style-type: none"> <li>The diagonals bisect each other</li> </ul>
<p><b>Rhombus</b> An equilateral parallelogram.</p>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite sides are congruent</li> </ul>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite angles are congruent</li> <li>Consecutive angles are supplementary</li> </ul>	<p>All of the same properties of a parallelogram and...</p> <ul style="list-style-type: none"> <li>The diagonals of a rhombus are <math>\perp</math> bisectors of one another</li> <li>The diagonals of a rhombus are angle bisectors</li> </ul>
<p><b>Rectangles</b> An equiangular parallelogram.</p>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite sides are congruent</li> </ul>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite angles are congruent</li> <li>Consecutive angles are supplementary</li> </ul>	<p>All the same properties of a parallelogram and...</p> <ul style="list-style-type: none"> <li>The diagonals of a rectangle are congruent</li> <li>The diagonals of a rectangle bisect one another</li> </ul>
<p><b>Squares</b> An equiangular and equilateral parallelogram. A regular quadrilateral.</p>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite sides are congruent</li> </ul>	<p>All of the same properties of a parallelogram</p> <ul style="list-style-type: none"> <li>Opposite angles are congruent</li> <li>Consecutive angles are supplementary</li> </ul>	<p>All of the same properties of a parallelogram and...</p> <ul style="list-style-type: none"> <li>The diagonals of a square are congruent, <math>\perp</math>, bisect one another</li> </ul>