## **Topic: Properties of Polygons**

Topic/Skill	Definition/Tips	Example
1. Square	Four equal sides	
11 Square	<ul> <li>Four right angles</li> </ul>	
	<ul><li>Opposite sides parallel</li></ul>	
	<ul> <li>Diagonals bisect each other at right</li> </ul>	
	angles	
	<ul> <li>Four lines of symmetry</li> </ul>	
	<ul> <li>Rotational symmetry of order four</li> </ul>	
2. Rectangle	• Two pairs of equal sides	
8	• Four right angles	
	• Opposite sides parallel	
	• Diagonals bisect each other, not at right	1
	angles	
	• Two lines of symmetry	
	• Rotational symmetry of order two	
3. Rhombus	• Four equal sides	$\frown$
	• Diagonally opposite angles are equal	$\rightarrow$ $\times$
	Opposite sides parallel	$\langle \rangle$
	• Diagonals bisect each other at right	$\searrow$ $\checkmark$
	angles	
	• Two lines of symmetry	
	• Rotational symmetry of order two	
4.	• Two pairs of equal sides	
Parallelogram	Diagonally opposite angles are equal	
	<ul> <li>Opposite sides parallel</li> <li>Diagonals bisect each other, not at right</li> </ul>	t t
	angles	
	• No lines of symmetry	
	• Rotational symmetry of order two	
5. Kite	• Two pairs of adjacent sides of equal	<u> </u>
	length	$\times$ $\times$
	• One pair of diagonally opposite angles	
	are equal (where different length sides	$\times \neq$
	meet)	
	• Diagonals intersect at right angles, but	$\checkmark$
	do not bisect	
	• One line of symmetry	
	No rotational symmetry	
6. Trapezium	• One pair of parallel sides	
	No lines of symmetry	
	No rotational symmetry	
	Special Case: Isosceles Trapeziums have	
	one line of symmetry.	