KS3 Unit 35 Angles in Polygons

Topic/Skill	Definition/Tips	Example
1. Polygon	A 2D shape with only straight edges.	Rectangle, Hexagon, Decagon, Kite etc.
2 Decules	A shows is marylan if all the sides and all the	^
2. Regular	A shape is regular if all the sides and all the angles are equal .	
	angles are equal.	
3. Names of	3-sided = Triangle	1 7
Polygons	4-sided = Quadrilateral	
	5-sided = Pentagon	Triangle Quadrilateral Pentagon Hexagon
	6-sided = Hexagon 7-sided = Heptagon	
	8-sided = Octagon	
	9-sided = Nonagon	
	10-sided = Decagon	Heptagon Octagon Nonagon Decagon
4. Sum of	$(n-2)\times 180$	Sum of Interior Angles in a Decagon =
Interior Angles	where n is the number of sides.	$(10-2) \times 180 = 1440^{\circ}$
5. Size of	$(n-2) \times 180$	Size of Interior Angle in a Regular
Interior Angle	$\frac{}{n}$	Pentagon =
in a Regular		$\frac{(5-2) \times 180}{5} = 108^{\circ}$
Polygon	You can also use the formula:	<u>5</u> = 108
	180 – Size of Exterior Angle	
6. Size of	$\frac{360}{}$	Size of Exterior Angle in a Regular
Exterior Angle	n	Octagon =
in a Regular	You can also use the formula:	$\frac{360}{8} = 45^{\circ}$
Polygon	180 – Size of Interior Angle	8
	100 Bize of Interior Interior	