



Content Correlation Chart

Episode 8 – Tessellational!

Major Concepts	Grades	Measurement	Geometry and Spatial Sense	Patterning and Algebra
1. Composing and decomposing common two dimensional shapes and sorting and classifying them by their attributes 2. Filling the plane with specific 2D shapes 3. Balancing)the nibbling technique for creating tessellating patterns provides a concrete model for the arithmetic/algebraic notion of two sides of an equation number sentence) 4. Visualizing connections between patterning and geometry	1	<ul style="list-style-type: none"> Estimate, measure (i.e., by minimizing overlaps and gaps), and describe area, through investigation using non-standard units (e.g., "It took about 15 index cards to cover my desk, with only a little bit of space left over.") 	<ul style="list-style-type: none"> Identify and describe common two-dimensional shapes and sort and classify them by their attributes Compose patterns, pictures, and designs, using common two-dimensional shapes Identify and describe shapes within other shapes (e.g., shapes within a geometric design) Cover outline puzzles with two-dimensional shapes (e.g., pattern blocks, tangrams) 	<ul style="list-style-type: none"> Create a repeating pattern involving one attribute (e.g., colour, size, shape) Represent a given repeating pattern in a variety of ways (e.g., pictures, actions, colours)
	2	<ul style="list-style-type: none"> Estimate, measure, and record the distance around objects, using non-standard units Estimate, measure, and record area, through investigation using a variety of non-standard units (e.g., determine the number of yellow pattern blocks it takes to cover an outlined shape) (Sample problem: Cover your desk with index cards in more than one way. See if the number of index cards needed stays the same each time.) 	<ul style="list-style-type: none"> Identify and describe various polygons (i.e., triangles, quadrilaterals, pentagons, hexagons, heptagons, octagons) and sort and classify them by their geometric properties (i.e., number of sides or number of vertices), using concrete materials and pictorial representations (e.g., "I put all the figures with five or more vertices in one group, and all the figures with fewer than five vertices in another group.") Compose and describe pictures, designs, and patterns by combining two-dimensional shapes (e.g., "I made a picture of a flower from one hexagon and six equilateral triangles.") Compose and decompose two- 	<ul style="list-style-type: none"> Identify repeating, growing, and shrinking patterns found in real-life contexts (e.g., a geometric pattern on wallpaper) Create a repeating pattern by combining two attributes Demonstrate, through investigation, an understanding that a pattern results from repeating an operation or making a repeated change to an attribute (e.g., colour, orientation)



			<p>dimensional shapes (Sample problem: Use Power Polygons to show if you can compose a rectangle from two triangles of different sizes.)</p> <ul style="list-style-type: none">• Cover an outline puzzle with two-dimensional shapes in more than one way• Create and describe symmetrical designs using a variety of tools (e.g., pattern blocks, tangrams, paper and pencil)	
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