

Primary - 2D Geometry

	KINDERGARTEN		GRADE 1	GRADE 2	
Specific Curriculum Expectations:	Explore, sort, and compare traditional and non-traditional 2 dimensional shapes	Identify and describe, using common geometric terms 2D shapes through investigation using concrete materials	Identify and describe common 2D shapes and sort and classify by their attributes using concrete materials and pictorial representations	identify and describe various polygons and sort and classify by their geometric properties	
Vocabulary:	circle square rectangle triangle rhombus oval star heart	flat shapes long shapes sorting corners	2D shapes faces sides vertices attribute Venn diagrams straight lines	attribute faces sides vertices vertex 2 dimensional Venn diagram parallel lines straight lines	
Strategies:	<ul style="list-style-type: none"><li>- students using sorting hoops using their bodies to represent shapes</li><li>- providing opportunities to manipulate, draw, and represent (e.g., on a geoboard) two-dimensional shapes discussing examples and non-examples of two-dimensional shapes</li><li>- discussions of such questions as the following encourage students to focus on the attributes of two-dimensional shapes and promote the development of appropriate geometric language</li></ul>	<ul style="list-style-type: none"><li>- using found materials of various geometric shapes to create new shapes</li><li>- visualize circles, squares, triangles, and rectangles, although their mental images will be of traditional shapes.</li><li>- recognize squares, triangles, and rectangles if the forms are familiar, but may not recognize shapes that appear different from students' mental images.</li></ul>	<ul style="list-style-type: none"><li>- identify attributes (e.g., color, size, texture, number of sides)</li><li>- identify concrete and pictorial examples of two-dimensional shapes (circles, triangles, quadrilaterals) of any form, size, or orientation.</li><li>- describe properties of two-dimensional shapes</li><li>- recognize non-traditional triangles and rectangles and apply their basic knowledge of shapes to verify their thinking</li><li>- visualize circles, squares, triangles, and rectangles, although their mental image will be of traditional shapes</li><li>- identify concrete and pictorial examples of three-dimensional shapes (e.g., cube, cone, sphere, rectangular prism), and describe their attributes (a sphere is round all over and it rolls, a prism has flat sides and it stacks)</li></ul>	<ul style="list-style-type: none"><li>- sort and classify them by their geometric properties (number of sides, number of vertices)</li><li>- identify concrete and pictorial examples of squares, rectangles, and triangles, regardless of form, size, or orientation (e.g., the following square and triangle)</li><li>- describe properties of two-dimensional shapes (e.g., a rectangle has four sides and four square corners) and three-dimensional figures (e.g., a cone has a curved surface and a circular face)</li><li>- identify two-dimensional shapes (triangle, quadrilateral, pentagon, hexagon, heptagon, octagon) by counting the number of sides or the number of vertices</li><li>- identify and describe concrete and pictorial examples of three-dimensional figures (cube, cone, cylinder, sphere, prism, pyramid)</li><li>- identify and describe the faces and surfaces of three-dimensional figures</li></ul>	
Tools and Manipulatives:	Attribute blocks pattern blocks found materials geoboards stickers tangrams variety of triangles shapes with curved sides sorting hoops	ipad apps circle square rectangle triangle rhombus (check french vocab) oval star heart	2D shapes: circles, triangles, rectangles, squares Venn Diagrams ipad apps	2D shapes: circles, triangles, quadrilaterals, pentagons, hexagons, heptagons, octagons ipad apps straws	

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