Unit Title: Shape Detectives

Integrated – Mathematics and Visual Art Kindergarten

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This unit was authored by a team of Colorado educators. The template provided one example of unit design that enabled teacherauthors to organize possible learning experiences, resources, differentiation, and assessments. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students.

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Content Area	Integrated Mathematics/Visual Arts	Grade Level	Kindergarten	
Course Name/Course Code				
Standard	Grade Level Expectations (GLE)			GLE Code
4. Shape, Dimension, and Geometric Relationships	1. Shapes can be described by their characteristics and position and created by composing andMA10-GR.K-S.4-GLE.1decomposing			MA10-GR.K-S.4-GLE.1
	2. Measurement is used to compare and order objects			MA10-GR.K-S.4-GLE.2
1. Observe and Learn to	1. Artists and viewers recognize characteristics and expressive features within works of art			VA09-GR.K-S.1-GLE.1
Comprehend	2. Personal feelings are described in and through works of art			VA09-GR.K-S.1-GLE.2
2. Envision and Critique to Reflect	1. Identify that art represents and tells the stories of people, places, or things VA09-GR.K-S.2-GLE.1			
3. Invent and Discover to Create	1. Create two- and three-dimensional work of art based on person relevance VA09-GR.K-S.3-GLE.1		VA09-GR.K-S.3-GLE.1	

Colorado 21st Century Skills

Together

Deeply, Thinking Differently

Critical Thinking and Reasoning: Thinking

Information Literacy: Untangling the Web

Collaboration: *Working Together, Learning*

Self-Direction: Own Your Learning

Invention: Creating Solutions



Integrated Curriculum Design: This interdisciplinary approach matches basic concepts in mathematics and visual arts – shape, line, compose, and compare forming overlaps in instruction of certain topics in an authentic integrated model.



Unit Titles	Length of Unit/Contact Hours	Unit Number/Sequence
Shape Detectives	Instructor choice	Instructor choice

Unit Title	Shape Detectives		Length of	Unit	Instructor choice based on schedule
Focusing Lens(es)	Point of view/Comparison	Standards and Grade Level Expectations Addressed in this Unit	MA10-GR.K-S.4-GLE.1 MA10-GR.K-S.4-GLE.2	VA09-GR.K VA09-GR.K VA09-GR.K VA09-GR.K	K-S.1-GLE.1 K-S.1-GLE.2 K-S.2-GLE.1 K-S.3-GLE.1
Inquiry Questions (Engaging- Debatable):	 Why do things look different out the window of your house at night vs. during the day? When it rains? When it snows? In the fall? In the spring? (VA09-GR.K-S.1-GLE.1) and (VA09-GR.K-S.3-GLE.1-EO.a,b,c,d) and (VA09-GR.K-S.4-GLE.1-EO. a, d) Can artists create under, over, beneath, around, inside? (MA10-GR.K-S.4-GLE.1.EO.a.i.) Why do some people see things differently than other people? (VA09-GR K-S1. GLE.2-EO.c) What things are round? Square? Triangular? Conical? (MA10-GR.K-S.4-GLE.1-IQ.2) What do things that are the same shape have in common? (MA10-GR.K-S.4-GLE.1-IQ.2) How can you express your feelings without words? (VA09-GR.K-S.1-GLE.1-EO. a, b, c) 				
Unit Strands	Geometry, Measurement and Data, Comprehend, Reflect, Create,				
Concepts	Dimension, attributes, compose, line, shape (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres), position/orientation (above, below, beside, in front of, behind, and next to), comparison, model, describe, order, classify, attributes, length, observation, perspective, proportion, expression, point of view, personal relevance, story, setting				

Generalizations My students will Understand that	Guiding Questions Factual Conceptual	
Composing and reorienting basic shapes creates more complex shapes, which reflect the kinds of shapes we find in the real world, texts, and works of art(MA10-GR.K-S.4- GLE.1-EO.b) (VA09-GR.K-S.1-GLE.1- EO. a, c)	What shapes can be used to create other shapes? (VA09-GR.K-S.1-GLE.1-EO. b)	How do shapes help us describe things and tell stories in our world? (VA09-GR.K-S.2-GLE.1- EO. b, c) How can you make one shape with other shapes? (MA10-GR.K-S.4-GLE.1-IQ.4)
Relative position provides the means to document an object's spatial location/position in relation to another object (MA10-GR.K-S.4-GLE.1-EO.a.i) (VA09-GR.K-S.1- GLE.1-EO. a, b)	What words describe an objects relative position? What are the ways to describe where an object is? (MA10-GR.K-S.4-GLE.1-IQ.1)	How does one's perspective change what one see or how they would describe a shape? (VA09-GR K-S1. GLE.2- EO.c)
Defining attributes describe and provide a means for comparing and naming shapes regardless of orientation, size, or color (MA10-GR.K-S.4-GLE.1-EO.a) (VA09-GR.K- S.1-GLE.1- EO. a, b)	What is an attribute? What shape has three sides? What are names of basic shapes and what do these shapes look like? What is the difference between a two-dimensional and three-dimensional shape?	 How can shapes be described and compared? (VA09-GR.K-S.2-GLE.1- EO. b, c) How are these shapes alike and how are they different? (MA10-GR.K-S.4-GLE.1-IQ.3) How can you use attributes to name shapes used in the art making process? (VA09-GR.K-S.3-GLE.1- EO. c)

Experimentation and playing with materials and techniques reveal personal observational perspectives in artwork. (VA09-GR.K-S.3-GLE.1-EO.a,b,c,d) (VA09-GR.K- S.1-GLE.1,- EO. c) (VA09-GR.K-S.2-GLE.1- EO. b, c)	Why is experimenting and playing with materials important in creating art? (VA09-GR.K-S.2-GLE.1- EO. c)		How might work change as an artist experiments and plays with materials? (VA09-GR.K-S.2-GLE.1- EO. c) How can the story of a work of art change if the images and shapes within it change? (VA09-GR.K-S.3-GLE.1- EO. a, b, c, d)	
Students observe the world from unique perspectives and their viewpoints inform their understanding. (VA09-GR.k- S.1-GLE.1,GLE.1- EO. a, c) (MA10-GR.K-S.4-GLE.1-EO.a.i) (VA09-GR.K-S.2-GLE.1- EO. b, c)	What is the difference in viewing an object through a magnifying instrument versus the naked lens of the eye?		How could details change depending on viewpoint? What would the view be from the airplane? From space? What is the ant's eye view of the world? From standing on the tip of a spoon?	
Critical Content:		Key Skills:		
My students will Know		My students will be able to (DO)		
 Ways that historical and/or contemporary artworks and picture books inspire and provide ideas for personal art and demonstrate a unique point of view. (VA09-GR.K-S.2-GLE.1) Art making, such as techniques, tools, and media such as but not limited to drawing, collage, painting, sculpture, and printmaking. (VA09-GR.K-S.3-GLE.1-EO.a,b,c,d) Characteristics and expressive features of art and design including shape and line in art, mathematics, and in the real world. (VA09-GR.K-S.1-GLE.1) Identify and correctly names shapes regardless of their orientation including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres (MA10-GR.K-S.4-GLE.1-EO.a) Identify shapes as two-dimensional or three-dimensional (MA10-GR.K-S.4-GLE.1-EO.a.iii) How to identify shapes using positional words including above, below, beside, in front of, behind, and next to in artworks, images, and in the real world. (MA10-GR.K-S.4-GLE.1-EO.a.i) (VA09-GR.K-S.1-GLE.1) 		 Compare and contrast the perspective in works of a GLE.3-EO.1) Use intentional planning artwork. (VA09-GR.K-S.3 Draw or sculpt lines and EO.a,b,c,d) Describe and discuss the or 3-dimensional art wor Analyze and compare she orientations, using inform parts, and other attribut Compose or model simple GR.K-S.3-GLE.1-EO.a,b,c, Describe several measure images (length, weight, he GLE.1) 	ne unique organizational styles and point of view or art and in the real world. (VA09-GR.K-S.1-GLE.1-EO.a,b,c, trial and error to create a two or three dimensional -GLE.1-EO.a,b,c,d) shapes to expresses an intent. (VA09-GR.K-S.3-GLE.1- e personal stories of the artist as represented in the 2 and rk. (VA09-GR.k-S.1-GLE.2-EO.a,b,c) apes using their attributes in different sizes and mal language to describe their similarities, differences, ses (MA10-GR.K-S.4-GLE.1-EO.b.i) le shapes to form larger shapes in a work of art (VA09- ,d) (MA10-GR.K-S.4-GLE.1-EO.b. ii, iii) reable attributes of objects in the real world and in artistic height) (MA10-GR.K-S.4-GLE.2-EO.a.i, a.ii) (VA09-GR.K-S.1-	

Critical Language: includes the Academic and Technical vocabulary, semantics, and discourse which are particular to and necessary for accessing a given discipline.				
EXAMPLE: A student in Language Arts can demonstrate the ability to apply and comprehend critical language through the following statement: "Mark Twain exposes the				
hypocrisy of slavery through the use of satire."				
A student in can demonstrate the	I can create a piece of art using lines and shapes that tells a story.			
ability to apply and comprehend critical language	The green triangle shape is on top of the circular table.			

The ice cream cone has a cone or conical shape.

through the following statement(s):

Academic Vocabulary:	Discovery, organization, compare, contrast, techniques, construct, demonstrate, personal, intent, positional words (e.g., below, above, in front of, behind, next to, and beside), describe, identify, analyze, building, differences, similarities, create, size, corners, describe, sort, classify, objects, difference, similar
Technical Vocabulary:	Techniques and media, artistic intent, expressive characteristics and features, drawing, sculpture, model, shapes, (e.g., sphere, circle, cube, square, triangle, rectangle, cone, cylinder, hexagon), geometric, organic, line, flat, solid, compose, decompose, two-dimensional, three-dimensional, non-objective, orientation, attributes, sides, measureable, attributes, length, height, representational, non-objective, collage

This instructional unit integrates the following separate curriculum overviews:

- Mathematics, Kindergarten, Shapes All Around Us (see the curriculum overview here in both Word and PDF format here); and
- Visual Art, Kindergarten, What Do I See...? (see the curriculum overview here in both Word and PDF format here)

Throughout this unit we denote levels of content area integration by listing an Integration Continuum Color*, as follows:

	GREEN	Active involvement in developmentally appropriate knowledge production results in work that fuses arts and non-arts disciplines.
	BLUE	Equal and significant attention is given to arts and non-arts techniques, skills, or concepts. Authentic experiences and media are used.
ĺ	<mark>PINK</mark>	Work combines some techniques, skills, and concepts from arts and non-arts disciplines, but proficiency is uneven.
	YELLOW	Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

* Adapted from Varieties of Arts Integration developed by Center for Applied Research and Educational Improvement and Perpich Center for Arts Education ©2002 Regents of the University of Minnesota

Unit Description:	This unit focuses on recognizing, naming, and using geometric shapes.		
Considerations:	 This unit has been designed to be taught in a kindergarten classroom or an art room, or in collaboration between the two. 4, 7 and performance assessment are particularly suitable for the art specialist. When starting this unit you need to consider the prior knowledge of your students and their preparedness level in terms of fine motor skills, and language development. For many of the lessons students will need precut shapes. 		
Unit Generalizations			
Key Generalization:	Defining attributes describe and provide a means for comparing and naming shapes regardless of orientation, size, or color.		
Supporting Generalizations:	 Composing and reorienting basic shapes creates more complex shapes, which reflect the kinds of shapes we find in the real world, texts, and works of art. Relative position provides the means to document an object's spatial location/position in relation to another object. Experimentation and playing with materials and techniques reveal personal observational perspectives in artwork. Students observe the world from unique perspectives and their viewpoints inform their understanding. 		

Performance Assessment: The capstor	e/summative assessment for this unit.	LEVEL OF INTEGRATION: GREEN
Claims: (Key generalization(s) to be mastered and demonstrated through the capstone assessment.)	Identify and describe geometric shapes.	Compare and name shapes regardless of orientation, size, or color.

Stimulus Material: (Engaging scenario that includes role, audience, goal/outcome and explicitly connects the key generalization)	As an artist you are going to show your artistic and math skills by creating a non-objective geometric shape collage to share with the school (bulletin board, art show school website, parent back to school night, etc.).
Product/Evidence: (Expected product from students)	Students will produce an individual collage to show that they can identify, name, and count shapes regardless of orientation, size, or color. They will create a collage that will incorporate a thoughtful composition using color, shape, and space. Students will count the numbers of shapes in each category and record them on a provided template.
Differentiation: (Multiple modes for student expression)	Teachers can scribe for students who need additional support.

Texts for independent reading or for class read aloud to support the content		
Informational/Non-Fiction	Fiction	
I Spy Art - Lucy McKlethwart	The Shape of Things - Dayle Ann Dodds	
Shapes in Nature - Judy Feldman	Mouse Shapes - Ellen Stoll Walsh	
Shapes, Shapes, Shapes - Tana Hoban	When a Line Bends a Shape Begins - Rhonda Growler Greene	
Paul Klee for Children - Silke Vry	Shapes That Roll - Karen Berman	
Shapes in Art - Rebecca Rissman	The Wing of a Flee - Ed Emberley	
An Eye For Color-(Bio of Josef Alber) - Natasha Wing	The Cat and The Bird (Inspired by Paul Klee) - Geraldine Elschner	
Piet Mondrian, Getting to Know World's Greatest Artists - Mike Venezla		

Ongoing Discipline-Specific Learning Experiences – <i>Mathematics</i>					
	Description:	Think/work like a mathematician – Expressing mathematical reasoning by constructing viable arguments, critiquing the reasoning of others [Mathematical Practice 3]	Teacher Resources:	 <u>http://schools.nyc.gov/Academics/CommonCoreLibrary/TasksUnitsStudentWork/default.htm</u> (lesson plans contains exemplars that could be replicated for students to critique the reasoning of others) <u>http://www.kindergartenkindergarten.com/math-problem-solving/</u> (math problem-solving prompts and explanations of problem-solving process) <u>http://www.mathwire.com/problemsolving/probs.html</u> (problem-solving resources) 	
			Student Resources:	N/A	
	Skills:	Present and defend solutions to problems and identify and describe the flaw in reasoning of others	Assessment:	Students choose their strategy for solving addition and subtraction problems and explain why their strategy led to a correct response. Students can also be presented an incorrect solution strategy and describe the error in the strategy (what went wrong).	
Ongoir	Ongoing Discipline-Specific Learning Experiences – Visual Art				
	Description:	Think like an artist: Recognize the	Teacher	Studio thinking 2: The real benefits of visual arts education- Hetland, I., Winner, E., Veenema,	

	characteristics and expressive features within works of art	Resources:	S., & Sheridan, K. <u>http://www.kinderart.com/artbook/</u> (Site with ideas/lessons for creating kindergarten art class books and portfolios)
		Student Resources:	Picture books that are read by the teacher can be made available for students to peruse images from the teachers image library
Skills:	Create, analyze, interpret and make meaning of art and design	Assessment:	Across the unit, students will create two- and three-dimensional works of art that employ the characteristics and expressive features of art. Students will describe and tell the story (written, dictated or orally) of their art work.

Prior Knowledge and Experiences

The description of the working knowledge and skills necessary for students to access the learning experiences throughout the unit. Teachers will use their professional judgment and knowledge of their students (including information gained from relevant pre-assessments) to determine the kinds of introductory learning experiences and/or reinforcement experiences that may need to be delivered prior to or within the unit.

Learning Experience # 1

LEVEL OF INTEGRATION: PINK

The teacher may provide pattern blocks so that students can analyze and compare geometric shapes.				
Generalization Connection(s):	Defining attributes describe and provide a means for comparing and naming shapes regardless of orientation, size, or color.			
Teacher Resources:	Pattern block manipulatives specific to your math program. <u>www.starfall.com</u> <u>http://interactivesites.weebly.com/geometry-shapes.html</u> <u>http://www.math-play.com/Geometry-Math-Games.html</u>			
Student Resources:	www.starfall.com http://interactivesites.weebly.com/geometry-shapes.html http://www.math-play.com/Geometry-Math-Games.html			
Assessment:	Students will be sorting geometric shapes and classifying by shape (not size or color). Students will be sharing their discoveries.			
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)		
(Multiple means for students to access content and multiple modes for student to express understanding.)	Teacher may need to provide clarification of the concept of same and different.	Students may work in pairs.		
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)		
	Teacher will provide the opportunity to look at the faces of 3- D shapes.	Students will discuss and identify relationships between 2-D and 3-D.		

Critical Content:	Recognize similarities between shapes
Key Skills:	Sorting by shape
Critical Language:	Geometric shape, same, different, side, line

Learning	Experience	#	2
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LEVEL OF INTEGRATION: YELLOW

The teacher may introduce circles, identify and describe shapes.	, squares, triangles, rectangles, hexagons, rhom	nbus, and trapezoids so that students can	
Generalization Connection(s):	Defining attributes describe and provide a means for comparing	and naming shapes regardless of orientation, size, or color.	
Teacher Resources:	http://www.abcya.com/shapes_geometry_game.htm http://www.firstschoolyears.com/numeracy/shape.html (worksheets) http://www.littlegiraffes.com/shapes.html (shape songs)		
Student Resources:	http://www.abcya.com/shapes_geometry_game.htm http://www.firstschoolyears.com/numeracy/shape/shape.html (worksheets) http://www.littlegiraffes.com/shapes.html (shape songs)		
Assessment:	Students will be able to name the geometric shape regardless of size and color.		
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
(Multiple means for students to access content and multiple modes for student to express understanding.)	Teacher provide template for matching each shape. Teacher will help children arrange their bodies on the floor to make shapes.	Students who have mastered the concept can help others.	
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	Teachers will provide a template to match the written word to the correct shape. Teacher will provide Geoboards.	Students can trace, copy, or write the name of each shape. Students can use geo boards to form shapes using rubber bands	
Critical Content:	Naming geometric shapes		

Critical Content:	Naming geometric shapes
	 Understanding shapes are the same regardless of size and color
	Understanding geometric shapes vs. organic shapes
Key Skills:	Naming and recognizing the characteristics or attributes of geometric shapes
Critical Language: Attributes, geometric shapes, organic shapes, circle, square, triangle, rectangle, hexagon, rhombus, and trapezo	

Learning Experience # 3		LEVEL OF INTEGRATION: BLUE	
The teacher may provide pattern l	block mats so that students can create and com	npose shapes.	
Generalization Connection(s):	Defining attributes describe and provide a means for comparing and naming shapes regardless of orientation, size, or color Identify and describe geometric shapes. Compare and name shapes regardless of orientation, size, or color. Experimentation and playing with materials and techniques reveal personal observational perspectives in artwork.		
Teacher Resources:	www.prekinders.com/pattern-blocks http://www.littlegiraffes.com/shapes.html (shape songs) http://www.math-play.com/Geometry-Math-Games.html http://www.abcya.com/shapes_geometry_game.htm		
Student Resources:	http://interactivesites.weebly.com/geometry-shapes.html http://www.math-play.com/Geometry-Math-Games.html http://www.abcya.com/shapes_geometry_game.htm		
Assessment:	Students will show that they can complete the pattern block ma	ts by matching the shapes.	
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
(Multiple means for students to access content and multiple modes for student to express understanding.)	 Teacher will provide pattern block mats or teacher printed papers that have a limited number of shapes for students to match. Teacher will provide each student with each of the shapes then sing Hokey Pokey with shapes ("You put you rectangle in"). 	Students will be able to match a limited number of shapes. Students will use the correct shape for the gamewatching other students first if necessary.	
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	Teacher will provide the pattern block mats without the individual shapes drawn in. Teacher will provide shape stencils for children to trace and combine to make pictures.	Students can identify and name shapes that they have used in their composition.	
Critical Content:	 Comparing measurable attributes noticing that the orientation does not change the shape. Characteristics and expressive features of art and design including shape and line. 		
Key Skills:	Creating a composition using geometric shapes.		
Critical Language:	Composition, attributes, geometric shapes		

Learning Experience # 4

LEVEL OF INTEGRATION: GREEN

The teacher may introduce art vo	ocabulary including shape, line, orientation (suc	h as over, under, beneath, around, inside), in art	
Generalization Connection(s):	Composing and reorienting basic shapes creates more complex shapes, which reflect the kinds of shapes we find in the real world, texts, and works of art. Relative position provides the means to document an object's spatial location/position in relation to another object. Identify and describe geometric shapes. Compare and name shapes regardless of orientation, size, or color. Experimentation and playing with materials and techniques reveal personal observational perspectives in artwork. Students observe the world from unique perspectives and their viewpoints inform their understanding.		
Teacher Resources:	http://www.k-5mathteachingresources.com/support-files/pattern-block-barrier-game.pdf (directions for pattern block barrier games, a shape book template, and numerous other activities)		
Student Resources:	http://www.teachingideas.co.uk/subjects/2d-shape (worksheets) YouTube Cray-Pas Art in the Classroom: (Paul Klee inspired city scape)		
Assessment:	Students will be able to create a composition using precut geometric shapes. They will be able to distinguish between line shape, geometric, and organic shapes.		
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
(Multiple means for students to access content and multiple modes for student to express understanding.)	The teacher may provide pattern block mat as a visual reference to create a composition.	Students can create their own composition using the visual reference.	
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	The teacher may provide an opportunity for students to describe their composition. The student may provide shape sponges, stamps or cookie cutters for children to use to create pictures.	Students can count the numbers of each shapes and describe their orientation.	
Critical Content:	 Use trial and error and reorganize materials (geometric shapes) and processes to plan and create works of art. Comparing measurable attributes. 		
Key Skills:	Arranging their shapes to create a composition.		
Critical Language:	Composition, line, orientation, arranging, geometric, organic		

Learning Experience # 5 LEVEL OF INTEGRATION: GR				
The teacher may provide an opportunity for students to discover and identify shapes in the real world.				
Generalization Connection(s): Composing and reorienting basic shapes creates more complex shapes, which reflect the kinds of shapes we find in the real				

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	world, texts, and works of art. Relative position provides the means to document an object's spatial location/position in relation to another object. Identify and describe geometric shapes. Compare and name shapes regardless of orientation, size, or color. Students observe the world from unique perspectives and their viewpoints inform their understanding.		
Teacher Resources:	Shapes in Nature - Judy Feldman Shapes, Shapes, Shapes - Tana Hoban http://www.thinkingfountain.org//nav/shapescluster.html (activities from the science museum of Minnesota) http://baynature.org/article/a-natural-geometry-class/		
Student Resources:	http://buggyandbuddy.com/art-kids-using-shapes/		
Assessment:	Students will be able to identify geometric shapes around their discovery journal students can draw the shapes they find.	school and outside in nature by going on a shape hunt. In a	
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
(Multiple means for students to access content and multiple modes for student to express understanding.)	Prior to doing the shape hunt the teacher may show nature photographs or videos that depict shapes in nature. If some children can't transfer well enough to recognize shapes in nature, the teacher can encourage them to look for more concrete shapes (road signs, etc.)	Students may work in pairs. Students may record concrete shapes.	
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	The teacher provides an opportunity for the student to label and count the shapes they find. Teacher may provide smart phones for recording shapes	The students will be able to label, count and share the shapes they find. Students use smart phones to take photos.	
Critical Content:	 Recognize characteristics and expressive features of art and Classify objects into given categories Describe several measurable attributes of a single object. 	design.	
Key Skills:	• Observe, Discover, Identify, Label shapes in the real world.		
Critical Language:	Observe, orientation, position, geometric shapes		

Learning Experience #6

LEVEL OF INTEGRATION: YELLOW

The teacher may provide an opportunity for students to demonstrate an understanding of how to count shapes that are not in linear order.

Generalization Connection(s):	Relative position provides the means to document an object's spatial location/position in relation to another object.
Teacher Resources:	http://ius.tech/counting-objects-worksheets-kindergarten The Cheerio Counting Book by Barbara McGraff

Student Resources:	http://ius.tech/counting-objects-worksheets-kindergarten		
Assessment:	Students will be able to count shapes that are not in linear order using manipulatives.		
Differentiation: (Multiple means for students to access content and multiple modes for student to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	The teacher may provide manipulatives for children to move from straight lines to random arrays.	The students will work with 10 or fewer objects.	
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)	
	The teacher may provide manipulatives for children to move from straight lines to random arrays. Students will have the opportunity to estimate before counting.	Children will with larger numbers of objects.	
Critical Content:	Understanding how to count shapes that are not lined up or in order.		
Key Skills:	Count shapes when they are not lined up or in order.		
Critical Language:	Geometric shapes, arrays, estimate		

Learning Experience #7 LEVEL OF INTEGRATION: PINK			
The teacher may show examples found in picture books of representational and non-objective art so that students can see and discuss examples of and then draw representational works of art using geometric shapes.			
Generalization Connection(s):	 Composing and reorienting basic shapes creates more complex shapes, which reflect the kinds of shapes we find in the real world, texts, and works of art. Relative position provides the means to document an object's spatial location/position in relation to another object. Identify and describe geometric shapes. Compare and name shapes regardless of orientation, size, or color. Experimentation and playing with materials and techniques reveal personal observational perspectives in artwork. Students observe the world from unique perspectives and their viewpoints inform their understanding. 		
Teacher Resources:	Google examples of non-objective art using geometric forms and take your pick. YouTube Mondrian art for children (MovingBox Productions) <u>http://www.onceuponanartroom.com/</u> (examples of children's art)		
Student Resources:	http://makingartfun.com/pietmondrian http://artsmarts4 kids .blogspot.com/2008/05/ paul-klee .htm		
Assessment:	Student will be to create a drawing using geometric shapes as a basis for their drawing.		
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)	

(Multiple means for students to access content and multiple modes for student to express understanding.)	Teachers will provide templates for tracing and examples of finished products.	Students can trace shapes.
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	Teachers will encourage students to use repetition of color, and or shape setting for their picture. Teachers will encourage students to create a background.	Students can use repetition of shape and or color in their composition. Students can create a background.
Critical Content:	 Model shapes in the world by building shapes from components and drawing shapes. Compose simple shapes to form larger shapes Recognize characteristics and expressive features of art and design in works of art. 	
Key Skills:	Design a drawing made of shapes.	
Critical Language:	Geometric shapes, setting, background, composition, orientation, representational, non-objective	