



Springfield Public Schools
Springfield, New Jersey 07081

Curriculum Guide

Math
Kindergarten

2024

This curriculum may be modified through varying materials, techniques, and strategies as per an individual student's IEP.

Springfield Board of Education
Approved August 26, 2024



**Springfield Public Schools
Springfield, New Jersey**

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Unit Overview Template

Content Area: Math **Grade Level:** Kindergarten **Unit Title:** Numbers to 10

Unit Summary: Students will develop understanding of what a problem is and why problems are integral to mathematics and develop an understanding of counting groups with up to 10 objects and each number said in the counting sequence represents one more.

Primary Interdisciplinary Connections: *English Language Arts*

21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy
☐ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy

Unit Rationale: This unit will..build students' agency as doers of mathematics, introduce students to the habits of mind that are integral to doing mathematics, build understanding of the norms of interaction that allow for a productive math learning environment where students can develop. This unit will also develop early quantitative reasoning skills as students count and compare numbers to 10.

Career Readiness (Standard 9):

9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).

9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Learning Targets

Standards: K.CC, K.G

Content Statements: Know number names and the count sequence; Count to tell the number of objects; Compare numbers; Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

CPI#:	Cumulative Progress Indicator (CPI):
K.CC.A.1	Count to 100 by ones and by tens
K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
K.CC.B.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object
K.CC.B.4.b	Understand that the last number name said, tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger



K.CC.B.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
K.CC.C.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
K.CC.C.7	Compare two numbers between 1 and 10 presented as written numerals.
K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12. 1.1	Recognize one’s feelings and thoughts.
SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- What does it mean to do math?
- How can I count, show and compare numbers
- How do you count, show, compare and write numbers

Unit Enduring Understandings:

- To develop proficiency with recognizing a problem.
- To build familiarity with the numbers 0-10.

Unit Learning Targets:

Students will....

- Describe ways we use math in our lives.
- Explain what a problem is.



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- Count objects to 10.
- Explain how to show numbers to 10.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, picture books, shape cards, pattern blocks, attribute blocks, connecting cubes, counters, spinners, Number cards 0-10, Dot Cards 1-10

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 1 Review
- Rote counting portfolio assessment
- Number recognition portfolio assessment
- Unit 2 Assessment
- Unit 3 Assessment



Lesson Plans

Lesson	Time Frame
Lesson 1 Math Is Mine (1.1)	60 minutes/1 day
Lesson 2 Count 1, 2, and 3 (2.1)	60 minutes/1 day
Lesson 3 Count 6 and 7 (3.1)	60 minutes/1 day

Teacher Notes:

The focus of this unit is to build students' agency as doers of mathematics. It is important that students understand that math is not just something done in school. Math is part of our daily lives and shows up in almost every activity. It is also important that students see themselves as skilled doers of math, so helping them understand that doing math is not carrying out operations or calculations. Rather, doing math is more accurately making sense of and solving problems and finding patterns and relationships among quantities and numbers.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 1.1 Math Is Mine Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

- ☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

- ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Picture books and magazines on a variety of non-fiction subjects related to daily life and our world, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Explore their identities as doers of math. - Describe their feelings and attitudes towards mathematics.	Lesson Sequence Number Routine: Students think about different methods of counting the number of toy cards in a photograph. Notice & Wonder: Students look at the pictures and share their observations with the class. Pose the Problem: Discuss each image and the things they see. Continue by telling math stories, using the pictures. Bring it Together: Review what math is. Have students draw a picture of what is easy for them to do in math.	On My Own: What do you like about math? Have students draw a picture. Exit Ticket: What is math? Draw a picture.



Differentiation:

BL: Provide opportunities to use the word favorite. Pick up a blue counter and say Blue is my favorite color. As you say favorite, gesture the meaning by picking up the blue counter and holding it to your heart, smiling, etc. Then have students ask each other What's your favorite color? Expect a full sentence response such as My favorite color is (red).

AL: Students write a sentence stating their favorite color, with a picture to match their writing.

Resources Provided:

- Picture books and magazines
- Journal/writing paper
- Color counters
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 2.1 Count 1, 2, and 3 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Bags, connecting cubes, counters, signs showing 1, 2, and 3 connecting cubes, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Understand the relationship between numbers and quantities when using objects and illustrations to count 1,2, and 3. - Students identify personal traits that make them good students, peers, and math learners.	Lesson Sequence - Number Routine: Students build their counting skills as they determine the number of dots that are shown on a card. - Notice & Wonder: Students are to notice there are three different types of animals. - Pose the Problem: Read the problem to the students. Be sure the learners are pointing to the dog and counting to one. Continue in the same manner with the other pets.	- On My Own-Page 35-36 - Exit Ticket- Page 9



- | | | |
|--|---|--|
| | <ol style="list-style-type: none">4. Develop the Math:
Students explore how to count a group with up to 3 objects.5. Bring it Together: What does counting tell you?
Counting tells how many are in a group. | |
|--|---|--|

Differentiation:

BL: Give students opportunities to explain how many objects people have. Point to students and ask, How many pencils/books does he/she have? Elicit full sentence responses with have/has.

AL: Students draw and write a picture/sentence about how many pencils/books.

Resources Provided:

- Bags, connecting cubes, counters, signs showing 1,2, and 3 connecting cubes.
- Journal/Writing paper
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template

Content Area: Math Lesson Title: 3.1 Count 6 and 7 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

- ☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

- ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Connecting cubes, counters, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Understand the relationship between numbers and quantities when using objects and illustrations to count 6 and 7. - Collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	Lesson Sequence Number Routine: Students will build their visual discrimination and counting skills as they determine the quantity of each item in the picture. Notice & Wonder: Students notice that there are two different types of fruit. Pose the Problem: Read the problem to the students. Develop the Math: Students explore how to count a group with up to 7 objects. Bring it Together: Check that students are pairing each object with one circle as they trace to show the number of peaches.	- On My Own: page 81, 82 - Exit Ticket: page 31



Differentiation:

BL: Give students an opportunity to practice answering the question How do you know? Ask students to count objects and then explain how they know by responding with a sentence explaining that they know because they counted. Recast if necessary, to model correct pronunciation and grammar.

AL: Students count objects and write the correct number under the quantity.

Resources Provided:

- Connecting cubes, counters
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives	X		
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills		X	
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Numbers to 10
Created: April 2024	Board Approved on: Type Here	



Unit Overview Template

Content Area: Math **Grade Level:** Kindergarten **Unit Title:** Sort, Classify and Count Objects

Unit Summary: Students develop understanding of attributes that are alike and different, how to sort objects into different groups according to their attributes, how to count objects in sorted groups and how to use a numerical quantity to describe the size of a group.

Primary Interdisciplinary Connections: *English Language Arts*

21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy
☒ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy

Unit Rationale: In this unit, Kindergarten students are introduced to the idea that objects have different characteristics or attributes that define them, such as the shape, size, or color of an object. These attributes are used to identify how objects are alike and how they are different. Students analyze objects that are the same shape but different sizes or the same size but different colors.

Career Readiness (Standard 9):

9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).

9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Learning Targets

Standards: K.CC; K.M

Content Statements: Count to tell the number of objects; Classify objects and count the number of objects in each category.

CPI#:	Cumulative Progress Indicator (CPI):
K.CC.B.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
K.CC.B.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
K.DLA.1	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10)
K.M.B.3	Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.



RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12. 1.1	Recognize one's feelings and thoughts.
SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I use attributes to sort a collection of objects?
- What does it mean if objects are alike or different?

Unit Enduring Understandings:

Students will...

- Compare objects with attributes that are the same or different.
- Sort objects in different ways depending on attributes.
- Sort a collection of objects and count the number of objects in a group.

Unit Learning Targets:

Students will....

- Identify how objects are alike and different.
- Explain how objects are alike and different.
- Recognize different attributes and sort objects into groups.
- Describe sorted groups by attribute and number of objects in each group.
- Climate Change Example: With prompting and support, students may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than 10 objects in each category. Students may count the number of objects in each category and sort the categories by count.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, attribute blocks, connecting cubes containers, 2-Part Sorting Mat (Teaching Resource), 3-Part Sorting Mat (Teaching Resource), pattern blocks

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 4 Assessment
- Sorting portfolio assessment
- Performance Task- Sorting



Lesson Plans

Lesson	Time Frame
Lesson 1 Alike and Different (4.1)	60 mins/1 day
Lesson 2 Sort Objects into Groups (4.2)	60 mins/1 day
Lesson 3 Count Objects in Groups (4.3)	60 mins/1 day

Teacher Notes:

Students may be familiar with simple words that describe objects, notably color words, shape words, and size words (red, round, small). Students may know how to name numbers through ten or more. They may also have learned that each object in a group needs its own number when the group is being counted.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 4.1 Alike and Different Time Frame: 30 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☒ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☒ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Attribute blocks, connecting cubes, containers, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Describe similarities and differences in the attributes of a given set of objects. - Describe similarities and differences of objects using the words alike and different. - Collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	Lesson Sequence Number Routine: Students are shown a number of the same objects and must identify how many of the object they see. Notice & Wonder: Gather writing utensils that match what is shown to allow students to explore real-world objects. Students can group the objects by attribute. Pose the Problem: Point at each set and ask How are these objects alike and different? Elicit the differences and the similarities. Press for details in students; explanations. Point to the same shapes and say	- On My Own page 139-140 - Exit Ticket page 55



	These are alike. Point to the different shapes and say This is different. 4. Develop the Math: Organize students in two pairs or small groups. Give each group of students a container with 3 red connecting cubes and 5 attribute blocks. Then give each group 3 additional red connecting cubes to place in a row on the desk or table. Then have the students tell his or her group if the objects are alike or different from the other objects in the row. 5. Bring it Together: Students place an X on the object that is different.	
Differentiation: BL: To give students opportunities to use this/that, put a few counters of various colors close and far from the students around the room. Say Tell me about the counters around the room. Elicit full sentence responses using this/that. AL: Students draw about an object and write a sentence or list adjectives about the object.		
Resources Provided: • Attribute blocks, connecting cubes, containers • Student Reveal Math Workbook • Exit Ticket		



Lesson Plan 2 Template

Content Area: Math Lesson Title: 4.2 Sort Objects into Groups Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Attribute blocks, 2-Part Sorting Mat (Teaching Resource), student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Sort objects into groups by attribute. - Identify which objects go into groups according to the attribute using adjectives that relate to size, color, and shape. - Discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	Lesson Sequence - Number Routine: Students are shown a number of the same object and must identify how many of the object they see. - Launch: Students will think about what makes an object different from the other objects in the group. - Pose the Problem: Read the problem to students. Create a poster showing how objects can be sorted into groups by various attributes. - Develop the Math: Students identify attributes and sort	- On My Own page 143, 144 - Exit Ticket page 56



	objects into groups according to attributes. 5. Bring It Together: Students sort the balls by drawing a line from each ball to a bin. 6. Practice: page 143 7. Reflect: Students complete the reflect question.	
Differentiation: BL: Work with students in groups. Provide markers, crayons, and colored pencils in the same three colors. Have students sort the supplies and then tell others what they sorted by. Students should discuss different ways they would sort. AL: Assign the interactive lesson to reinforce targeted skills.		
Resources Provided: • attribute blocks, 2-Part Sorting Mat (Teaching Resource) • Student Reveal Math Workbook • Exit Ticket		



Lesson Plan 3 Template

Content Area: Math Lesson Title: 4.3 Count Objects Time Frame: 60 mins/1 day
in Groups

Lesson Components

21st Century Themes

☒ Global Awareness ☒ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: connecting cubes in 5 different colors, two kinds of manipulatives with similar colors, red and blue crayons, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - determine the number of objects in sorted groups. - identify the number of objects in sorted groups by counting. - discuss the value of hearing different viewpoints and approaches to problem solving.	Lesson Sequence - Number Routine: Students will determine a pattern and identify the next term in the pattern. - Launch: Students think about similarities and differences in objects' attributes by looking at four different groups. - Pose the Problem: How can Layla sort the plants? - Develop the Math: Students sort objects into groups and count to determine the number of objects in each group. - Bring It Together: Students count and write the number of birds in each group. - Practice: Page 147, 148 - Reflect: How are these sorted? How can you	- On My Own page 147, 148 - Exit Ticket page 57



show how many are in
each group?

Differentiation:

BL: Work with students in small groups. Provide two kinds of manipulatives of the same colors mixed together with 1-5 of each kind of manipulative. Students sort the manipulatives either by color or by type and count how many of each they have. Have students explain how they sorted their objects.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- connecting cubes in 5 different colors, two kinds of manipulatives with similar colors, red and blue crayons
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Sort, Classify and Count Objects
Created: April 2024	Board Approved on: Type Here	



Unit Overview Template

Content Area:	Math	Grade Level:	Kindergarten	Unit Title:	2 and 3 D shapes
Unit Summary: Students develop understanding of basic 2-dimensional shapes as flat and 3-dimensional shapes as solid.					
Primary Interdisciplinary Connections: <i>English Language Arts</i>					
21st Century Themes ✕ Creativity and Innovation ✕ Critical Thinking and Problem Solving ✕ ICT Literacy ☐ Information Literacy ☐ Life and Career Skills ✕ Communication and Collaboration ✕ Media Literacy					
Unit Rationale: This unit will introduce geometry in Kindergarten, starting with 2-Dimensional shapes, followed by 3-Dimensional shapes.					
Career Readiness (Standard 9): 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).					

Learning Targets

Standards: K.G	
Content Statements: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres); Analyze, compare, create, and compose shapes.	
CPI#:	Cumulative Progress Indicator (CPI):
K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6	Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something



	that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12. 1.1	Recognize one's feelings and thoughts.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I use attributes to sort a collection of objects?
- How can I identify 2-dimensional shapes?
- How can I identify 3-dimensional shapes

Unit Enduring Understandings:

Students will

- Identify basic 2-dimensional shapes.
- Describe positions of objects relative to one another using positional words.
- Recognize shapes regardless of their color, size, or position.
- Distinguish 2- dimensional and 3-dimensional shapes.
- Identify shapes in the environment and develop language to describe their relative position.

Unit Learning Targets:

Students will....

- Identify and name shapes.
- Identify and name flat shapes.
- Describe the relative position of flat shapes.
- Identify if a shape is flat or solid.
- Describe the difference between flat shapes and solid shapes.
- Identify and name solid shapes.
- Describe the location of solid shapes.
- Climate Change Example: Students may use sticks and clay to model trees and umbrellas and may then draw shapes (e.g., triangle, rectangle) to model those objects. With prompting and support, they may ask and answer questions about how trees and umbrellas may be used to reduce the warming effect of sunlight.



Evidence of Learning

Summative Assessment: 4 days

Equipment Needed: Computer, projector, document camera, attribute blocks, wooden geometric solids, connecting cubes

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 5 Assessment
- Unit 11 Assessment
- Performance Task - Shapes
- Shape Portfolio Assessment
- Performance Task-Solid Shapes



Lesson Plans

Lesson	Time Frame
Lesson 1 Triangles (5.1)	60 mins/1 day
Lesson 2 Squares and Rectangles (5.2)	60 mins/1 day
Lesson 3 2D and 3D Shapes (11.1)	60 mins/1 day

Teacher Notes:

Students are introduced to geometry in Kindergarten, starting with 2D shapes. The shapes include triangles, squares, rectangles, circles, and hexagons. Shapes are identified by the number of sides and vertices. By counting and numbering the sides and vertices, students identify various examples of each shape.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 5.1 Triangles Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

- ☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

- ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☒ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Objects shaped like triangles, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Identify, name, and describe squares and rectangles. - Identify, name, and describe rectangles and squares using precise adjectives and nouns specific to triangles - Recognize personal strengths through thoughtful self-reflection.	Lesson Sequence - Number Routine: Students look for matches when looking at numbers and dot cards. - Launch: Students begin to notice attributes of triangles by comparing and contrasting shapes. - Pose the Problem: As students engage in discussing the answer to the question, restate their descriptions with adjectives such as straight, pointy, and 3-sided. Also interject nouns used in describing a triangle such as side and corner. - Develop the Math: Students describe triangles of different shapes and sizes.	- On My Own page 165-166 - Exit Ticket page 77



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| | <ol style="list-style-type: none">5. Bring It Together:
Students work together to identify triangles within a group of mixed shapes.6. Practice: On My Own
page 165-166.7. Reflect: Students complete the Reflect question. | |
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Differentiation:

BL: Work with small groups. Have each student look at a triangle. Remind them that triangles are all about threes. Have them find the sides of their triangles. If students are struggling counting the sides, have them count to three in unison as they point to each side of their triangles. Then have them find the corners of their triangles and count those in unison.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Objects shaped like triangles
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 5.2 Squares and Triangles Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☒ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Objects shaped like squares and rectangles, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Identify, name, and describe squares and rectangles. - Identify, name, and describe rectangles and squares using precise adjectives and nouns specific to these shapes. - Actively listen without interruption as peers describe how they approached a complex mathematical task.	Lesson Sequence - Number Routine: Students look for matches when looking at numbers and dot cards. - Launch: Students begin to recognize attributes of rectangles by comparing them to a circle. - Pose the Problem: Read the problem to students. - Develop the Math: In pairs, have students compare a square and a rectangle. Students sort squares and rectangles of different sizes and colors. - Bring It Together: Students work together to circle all squares and rectangles in a group of shapes.	- On My Own page 171-172 - Exit Ticket page 78



- | | | |
|--|---|--|
| | <ol style="list-style-type: none">6. Practice: On My Own
page 171-1727. Reflect: Students
complete the Reflect
question. | |
|--|---|--|

Differentiation:

BL: Work with students in groups. Have students each look at a rectangle. Review how many sides and how many vertices or corners a rectangle has. Have them find the sides of their rectangles. Have students count and number each side in one color. Then count and number each vertex in a different color.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Objects shaped like squares and rectangles
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template

Content Area: Math Lesson Title: 11.1 2D and 3D Shapes Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Attribute blocks, wooden geometric solids or other 3D shapes, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Identify shapes as 2D or 3D. - Describe the difference between 2D and 3D shapes with adjectives and nouns. - Break down a situation to identify the problem at hand.	Lesson Sequence - Number Routine: Students practice comparing quantities by determining which group of objects they would rather have. - Launch: Students will compare and contrast flat and solid shapes. - Pose the Problem: As students discuss what they notice, restate their descriptions with adjectives such as flat, curved, and nouns such as face, corner, surface. Encourage students to use these words when describing the shape. - Develop the Math: Students work in pairs to	- On My Own page 115-116 - Exit Ticket page 199



	classify shapes as flat shapes or solid shapes. 5. Bring It Together: Check that students identify all of the 3D shapes. Clarify shapes as needed. 6. Practice: On My Own page 115-116 7. Reflect: Students complete the Reflect question.	
Differentiation: BL: Work with students in small groups. Give each group 2 and 3D shapes. One student groups two shapes of the same classification. Another student adds a third shape that belongs. A third student checks the accuracy. If students struggle to add a third shape, then have them work together to find and add the third shape. As students improve, have one student place 5 shapes with 1 of them wrong while the other student finds the error. AL: Assign the interactive lesson to reinforce targeted skills.		
Resources Provided: • Attribute blocks, wooden geometric solids or other 3D shapes • Student Reveal Math Workbook • Exit Ticket		



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: 2 and 3D Shapes
Created: April 2024	Board Approved on:	Type Here



Unit Overview Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Understand Addition and Subtraction
Unit Summary: Students develop understanding of how to solve add to and put together problems, taking apart a quantity, subtraction as taking from a given quantity, how to solve word problems involving addition and subtraction, recognizing and representing addition situations, addition as putting two numbers together and subtraction as taking apart.		
Primary Interdisciplinary Connections: <i>English Language Arts</i> 21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy ☐ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy		
Unit Rationale: Students are introduced to basic addition and subtraction concepts through 10. They use drawings and objects to concretely represent addition and subtraction stories. Students are introduced to the plus, subtraction and equal signs.		
Career Readiness (Standard 9): 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).		

Learning Targets

Standards: K.OA	
Content Statements: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	
CPI#:	Cumulative Progress Indicator (CPI):
K.OA.A.1	Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.OA.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
K.OA.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
K.OA.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
K.OA.A.5	Demonstrate fluency for addition and subtraction within 5.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.



RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12. 1.1	Recognize one's feelings and thoughts.
SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I solve addition word problems?
- How can I solve subtraction word problems?

Unit Enduring Understandings:

Students will:

- Count as a strategy for adding and subtracting amounts.
- Join numbers as a method of adding.
- Represent objects with drawings, manipulatives, and equations.
- Use strategies for solving , such as counting on fingers, acting it out, or drabing a picture to represent the problem.

Unit Learning Targets:

Students will....

- Understand addition in problems.
- Show putting together two parts to find the total.
- Represent and solve problems.
- Analyze slow addition and subtraction word problems using objects or drawings.
- Represent and solve addition and subtraction word problems.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, counters, number cubes, Equation Symbol Cards (Teaching Resource), Number Cards 0-10 (Teaching Resource), number cubes

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 6 Assessment
- Unit 7 Assessment
- Performance Task
- Addition and Subtraction Portfolio Assessment



Lesson Plans

Lesson	Time Frame
Lesson 1 Represent and Solve Add to Problems (6.1)	60 mins/1 day
Lesson 2 Represent and Solve More Add to Problems (6.2)	60 mins/1 day
Lesson 3 Represent Take Apart Problems (7.1)	60 mins/1 day

Teacher Notes:

In this unit, students are introduced to basic addition concepts through 10. They use drawings and objects to concretely represent addition stories, to add one part to another part, and to put two parts together. Students are introduced to the plus and equal signs, and they learn how to use those signs to represent addition situations symbolically. Students also solve word problems involving “add to” and “put together” situations.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 6.1 Represent and Solve Add to Problems Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☒ Civic Literacy ☒ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Connecting cubes, counters, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Represent addition as adding to a number. - Represent addition as adding to a number using the verb join in the present progressive tense. - Exercise creativity by solving a problem using more than one approach.	Lesson Sequence - Number Routine: Students will build their visual discrimination and counting skills as they find an exact number of things. - Launch: Students explore a situation that can be represented using addition. - Pose the Problem: Read the problem to the students. - Develop the Math: Students use counters to model addition problems within 10. They apply their understanding of counting objects to get the sum (total). - Bring It Together: Students draw or model 4	- On My Own page 195-196 - Exit Ticket page 95



backpacks and then draw or model 2 more backpacks. They count to get the total number of backpacks.

6. Practice: On My Own page 195-196
7. Reflect: Students complete the Reflect question.

Differentiation:

BL: Work with students in groups. Have students make a drawing of a farm barnyard. Have each student draw a different set of farm animals, such as 3 horses or 2 cows. Then have them take turns making up a word problem that can be solved by putting together two groups of animals. Have students model their word problems using connecting cubes to demonstrate each word problem they create.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Connecting cubes, counters
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 6.2 Represent and Solve More Add to Problems Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☒ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Connecting cubes, counters, Equation Symbol Cards (Teaching Resource), Number Cards 0-10 (Teaching Resource), student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Represent addition word problems as adding to a number. - Represent word problems using plus and equals. - Analyze the components of a problem to make informed decisions when engaging in mathematical practices.	Lesson Sequence - Number Routine: Students build their visual discrimination skills as they determine what is being shown on each card. These prompts encourage students to talk about their reasoning. - Launch: Students explore a situation that can be represented using addition. - Pose the Problem: Read the problem to the students. - Develop the Math: Students use symbol cards to model addition problems. They apply	- On My Own page 199-200 - Exit Ticket page 96



	their understanding of the plus sign and the equal sign to represent addition problems. 5. Bring It Together: Students listen to the addition story and then show the story with counters or drawings. Students then write the equation. 6. Practice: On My Own page 199-200 7. Reflect: Students complete the Reflect question.	
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Differentiation:

BL: Work with students in pairs. Provide each pair with number cards 0 to 10, a “+” card, an “=” card, and counters. Read the following problem: Chris has 4 blueberries. His mom gives him 3 more blueberries. How many blueberries does Chris have now? Have students work together to build the number sentence and find the unknown number using counters.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Connecting cubes, counters, Equation Symbol Cards (Teaching Resource), Number Cards 0-10 (Teaching Resource)
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template

Content Area: Math Lesson Title: 7.1 Represent Take Apart Problems Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Counters, cups, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Represent “take apart” problems. - Represent “take apart” problems using the phrasal verb take apart in the present continuous tense. - Break down a complex problem into manageable parts in order to solve.	Lesson Sequence - Number Routine: Students build number recognition as they identify what they think they saw on each of the three cards shown. - Launch: Students will notice and wonder about the take apart situation happening in the scene. - Pose the Problem: Read the problem to students. - Develop the Math: Students use counters to model take apart problems. - Bring It Together: Students draw circles around the two groups and then write the numbers to show the parts. Students can use	- On My Own page 225-226 - Exit Ticket page 113



counters to represent the tennis balls, if needed. Check that students write two numbers that have a sum of 5.

6. Practice: On My Own page 225-226
7. Reflect: Students complete the Reflect question.

Differentiation:

BL: Work with students in pairs. Have one partner model a total number using up to 10 counters. Have the other partner model one way to break the counters into two groups/ Then write down on a piece of paper the numbers that represent the two groups of counters. If students are writing the numerals incorrectly, then help them by reminding them to use the counting method to verify that they have the correct number of counters for each group.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Counters, cups
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Understanding Addition and Subtraction
Created: April 2024	Board Approved on: Type Here	



Unit Overview Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Addition and Subtraction Strategies
Unit Summary: Students develop understanding of addition as counting on from one number by another number, resulting in a sum; subtraction as taking away by counting back from one number by another number, resulting in a difference; composing and decomposing numbers 6-10 in different ways; representing composition and decompositions with equations.		
Primary Interdisciplinary Connections: <i>English Language Arts</i> 21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy ☐ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy		
Unit Rationale: In this unit Kindergarten students learn composing and decomposing numbers is about recognizing and representing numbers as combinations of smaller numbers. Students develop skill in finding multiple ways to make a given number or break apart a given number.		
Career Readiness (Standard 9): 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).		

Learning Targets

Standards: K.OA	
Content Statements: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	
CPI#:	Cumulative Progress Indicator (CPI):
K.OA.A.1	Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.OA.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
K.OA.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
K.OA.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
K.OA.A.5	Demonstrate fluency for addition and subtraction within 5.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).



RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12. 1.1	Recognize one's feelings and thoughts.
SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I make and decompose numbers in more than one way?
- How are adding and subtracting similar and different?

Unit Enduring Understandings:

Students build proficiency with

- Fluently adding and subtracting within 5.
- Adding to compose numbers 6-10 in different ways.
- Decomposing numbers 6-10 using models.

Unit Learning Targets:

Students will....

- Solve addition and subtraction equations within 5.
- Explain how to solve addition and subtraction equations within 5.
- Make numbers 5-10 in different ways.
- Explain how to make numbers 5-10 in different ways.
- Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a back yard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, cards with addition problems, Number Path (Teaching Resource), Ten-Frame (Teaching Resource), connecting cubes, Number Bond 3 (Teaching Resource), counters

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 8 Assessment
- Performance Task



Lesson Plans

Lesson	Time Frame
Lesson 1 Add within 5 (8.1)	60 mins/1 day
Lesson 2 Subtract within 5 (8.2)	60 mins/1 day
Lesson 3 Ways to Make 6 and 7 (8.3)	60 mins/1 day

Teacher Notes:

Composing and decomposing numbers is about recognizing and representing numbers as combinations of smaller numbers. In this unit, students develop skill in finding multiple ways to make a given number (compose) or break apart a given number (decompose).

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 8.1 Add Within 5 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

- ☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

- ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Cards with addition problems, Number Path Teaching Resource, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Solve addition equations within 5. - Articulate solving addition equations within 5 by using the verbs plus and equals. - Identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.	Lesson Sequence - Number Routine: Students break apart a given number in different ways. Then have students share their decompositions with the class. Record them on the board. - Launch: Students observe a number path to begin their exploration of adding within 5. - Pose the Problem: Read the problem to students. - Develop the Math: Students solve addition equations using number paths. - Bring It Together: Student partners solve an addition equation, using a number path if needed.	- On My Own page 5-6 - Exit Ticket 137



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|--|---|--|
| | <ol style="list-style-type: none">6. Practice: On My Own
page 5-67. Reflect: Students
complete the Reflect
question. | |
|--|---|--|

Differentiation:

BL: Work with students alone or in small groups on simple problems involving adding real world objects. For example, I have 2 pencils. I find 3 more in my desk. How many do I have in all? You can use real objects or drawings of them. Make sure each student is pointing to the correct number on their Number Path Teaching Resource, then count out jumps on the path out loud as all students do them on their own paths.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Cards with addition problems, Number Path Teaching Resource
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 8.2 Subtract with 5 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Cards with subtraction problems, Number Path Teaching Resource, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Solve subtraction equations within 5. - Articulate solving subtraction equations within 5 using the verbs minus and equals. - Set a focused mathematical goal and make a plan for achieving that goal.	Lesson Sequence Number Routine: Students break apart a given number in different ways. Have students show or draw how they can break apart the number 10. Then have students share their decompositions with the class. Record them on the board. Launch: Students explore a number path shown in a real-world context. Pose the Problem: Read the problem to the students. Develop the Math: Students solve subtraction equations using number paths.	- On My Own page 9-10 - Exit Ticket page 138



- | | | |
|--|--|--|
| | <ol style="list-style-type: none">5. Bring It Together:
Students solve a subtraction equation, with or without the help of a number path.6. Practice: On My Own
page 9-107. Reflect: Students complete the Reflect question. | |
|--|--|--|

Differentiation:

BL: Work with students in a small group to solve subtraction problems. You can use problems from the lesson or invent your own. Ask each student to put their finger on the starting number on the Number Path Teaching Resource. Watch carefully to make sure each student is making the right number of jumps on their number paths. Ask each student where they landed on the path. Have students agree or disagree with the answer.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Cards with subtraction problems, Number Path Teaching Resource
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template

Content Area: Math Lesson Title: 8.3 Ways to Make 6 and 7 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Counters, Ten-Frame Teaching Resource, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: • Compose 6 and 7 in different ways. • Articulate different ways to make 6 and 7 by listing the combinations using might. • Identify and discuss the emotions experienced during math learning.	Lesson Sequence 1. Number Routine: Students break apart a given number in different ways. Then have students share their decompositions with the class. Record them on the board. 2. Launch: Students compare groups of 6 objects composed in different ways. 3. Pose the Problem: Read the problem to students. 4. Develop the Math: Students explore ways to make 6 and 7 using different number combinations. 5. Bring It Together: Students write an	• On My Own page 13-14 • Exit Ticket page 139



	addition equation to math a drawing of how to make 6. 6. Practice: On My Own page 13-14. 7. Reflect: Students complete the Reflect question.	
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Differentiation:

BL: Work with students in a small group. Use a list of equations that show how to make 6. Emphasize there are many ways to make 6. Have students take turns reading the equations. Then work as a group to model each equation using counters. If students struggle getting started, provide one addend and have them find the other addend that makes 6. Repeat for composing 7.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Counters, Ten-Frame Teaching Resource
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Addition and Subtraction Strategies
Created: April 2024	Board Approved on: Type Here	



Unit Overview Template

Content Area: Math **Grade Level:** Kindergarten **Unit Title:** Numbers 11 to 19

Unit Summary: Students develop understanding of representing a number of objects with a numeral; composing and decomposing numbers greater than 10 by making a group of ten ones and some more ones.

Primary Interdisciplinary Connections: *English Language Arts*

21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy
☐ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy

Unit Rationale: In this unit, students learn to represent a group of 11-19 objects. They also learn how to compose and decompose groups of 11-19 objects into ten ones and some more ones.

Career Readiness (Standard 9):

9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).

9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Learning Targets

Standards: K.CC, K.NBT

Content Statements: Know number names and the count sequence; Work with numbers 11–19 to gain foundations for place value.

CPI#:	Cumulative Progress Indicator (CPI):
K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
K.NBT.A	Work with numbers 11–19 to gain foundations for place value.
K.NBT.A.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.



SEL.PK-12. 1.1	Recognize one's feelings and thoughts.
SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I represent, make, and decompose numbers 11-19?
- What does it mean to show a number?

Unit Enduring Understandings:

Students build proficiency with

- Counting the number of objects in a group up to 19.
- Using objects and equations to make a number.
- Using objects and equations to represent a decomposition of a number.

Unit Learning Targets:

Students will....

- Represent numbers 11-19.
- Explain how to represent numbers 11-19.
- Decompose groups of objects 11-19.
- Explain how to decompose groups of objects 11-19.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, counters, connection cubes, Double Ten Frames (Teaching Resources), Number Bond 3 (Teaching Resources)

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 9 Assessment
- Unit 10 Assessment
- Performance Task
- Number Recognition Portfolio Assessment



Lesson Plans

Lesson	Time Frame
Lesson 1 Represent 11, 12, and 13 (9.1)	60 mins/1 day
Lesson 2 Make 11, 12, and 13 (9.2)	60 mins/1 day
Lesson 3 Represent 16 and 17 (10.1)	60 mins/1 day

Teacher Notes:

In this unit, students learn to represent a group of 11 to 15 objects. They learn how to compose and decompose groups of 11 to 15 objects into tens and ones and some more ones.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 9.1 Represent 11, 12, and 13 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Counters, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Represent the numbers 11, 12, and 13 by counting out objects and writing the corresponding number. - Articulate numerals 11, 12, and 13 by matching them to sets of eleven, twelve, and thirteen objects. - Exchange ideas for mathematical problem-solving with a peer and provide thoughtful and constructive feedback.	Lesson Sequence - Number Routine: Students identify pairs of cards that show different representations of the same number. - Launch: Students explore groups of 11, 12 and 13 objects. - Pose the Problem: Read the problem to students. - Develop the Math: Students explore how to count and represent groups of 11, 12, and 13. - Bring It Together: Students use counting to determine the total number of butterflies. Then they use a number to represent the group. Students can work individually or with a	- On My Own page 47-48 - Exit Ticket page 157



	partner before sharing their work. 6. Practice: On My Own page 47-48 7. Reflect: Students complete the Reflect question.	
Differentiation: BL: Work with students in pairs. One student secretly chooses 11, 12, or 13 counters. Then they arrange them in lines, arrays, or circles. The other students counts the counters without moving them and tells the total. If a student is having trouble counting to the correct total, then encourage them to touch each counter as they count. After counting, have students switch roles and repeat. AL: Assign the interactive lesson to reinforce targeted skills.		
Resources Provided: • Counters • Student Reveal Math Workbook • Exit Ticket		



Lesson Plan 2 Template

Content Area: Math Lesson Title: 9.2 Make 11, 12, and 13 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Counters, Double Ten-Frames Teaching Resource, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - make 11, 12, and 13 ad ten ones and some more ones using concrete objects, drawings, and equations. - Explain how to make a group of 11, 12, and 13 by adding 1-3 objects to a group of 10 using the expression some more. - Practice strategies for persisting at a mathematical task, such as setting a small goal or setting timers for remaining focused.	Lesson Sequence - Number Routine: Students identify pairs of cards that show different representations of the same number. - Launch: Students explore groups of 11, 12 and 13 objects shown in groups of ten ones and some more ones. - Pose the Problem: Read the problem to students. - Develop the Math: Students use counters and ten-frames to make 11, 12, and 13. - Bring It Together: Students color bowls to represent 13 as ten ones and some more ones,	- On My Own page 51-52 - Exit Ticket page 158



	then write an equation to match. 6. Practice: On My Own page 51-52 7. Reflect: Students complete the Reflect question.	
Differentiation: BL: Work with students in groups. Provide counters and a Double Ten Frames Teaching Resource. Show an equation with one addend of 10, and a sum of 11, 12, or 13. Have one student place counters in a ten frame to show the equation. When the student placing the counters has shown the sum of the equation, the other student says “Stop!” If students have trouble realizing when to say “Stop,” have students count aloud as they place the counters. AL: Assign the interactive lesson to reinforce targeted skills.		
Resources Provided: - Counters, Double Ten-Frames Teaching Resource - Student Reveal Math Workbook - Exit Ticket		



Lesson Plan 3 Template

Content Area: Math Lesson Title: 10.1 Represent 16 and 17 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Connecting cubes, counters, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Represent the numbers 16 and 17 by counting out objects and writing the corresponding number. - Match verbally and in writing the numerals 16 and 17 to sets of sixteen and seventeen objects. - Discuss the value of hearing different viewpoints and approaches to problem solving.	Lesson Sequence Number Routine: Students build their counting skills by counting groups of objects, each of which is organized in a group of ten plus some more. Students count the numbers in ten frames to determine the total number of counters. Display one set of ten frames at a time for a few seconds. Launch: Students notice the different number of objects in each group. Students wonder how they can represent the number of objects in each group.	- On My Own page 81-82 - Exit Ticket page 175



3. Pose the Problem: Read the problem to the students.
4. Develop the Math: Students make groups and use numbers to represent 16 and 17.
5. Bring It Together: Students count the flowers and circle the number to show how many.
6. Practice: On My Own page 81-82
7. Reflect: Students complete the Reflect question.

Differentiation:

BL: Work with students in pairs. Give each pair 20 connecting cubes. Students take turns asking the other student to make 16 or 17 with connecting cubes. Make sure that students check whether they received the correct number of cubes from their partner. If so, they should then take it apart and their partner can request a number. If students are miscounting, review order of numbers and counting each number twice.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Connecting cubes, counters
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Numbers 11 to 19
Created: April 2024	Board Approved on: Type Here	



Unit Overview Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Count to 100
Unit Summary: Students develop understanding of the counting sequence; counting to tell how many objects are in a group.		
Primary Interdisciplinary Connections: <i>English Language Arts</i>		
21st Century Themes ☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ ICT Literacy ☐ Information Literacy ☒ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy		
Unit Rationale: In this unit, students extend their counting skills to count to 100. Students develop an understanding of counting by 10's.		
Career Readiness (Standard 9): 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).		

Learning Targets

Standards: K.CC	
Content Statements: Know number names and the count sequence; Count to tell the number of objects.	
CPI#:	Cumulative Progress Indicator (CPI):
K.CC.A	Know number names and the count sequence.
K.CC.A.1	Count to 100 by ones and by tens.
K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.B.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12.1.1	Recognize one's feelings and thoughts.



SEL.PK-12. 1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12. 2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12. 3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12. 4.1	Develop, implement and model effective problem-solving, and critical thinking skills.
Unit Essential Questions: • How can I count to 100 by 1's and by 10's? • What does it mean to count by 1's and by 10's?	
Unit Enduring Understandings: Students will • Count by 1's to 100. • Count by 10's to 100. • Count forward beginning with any given number less than 100.	
Unit Learning Targets: Students will.... • Count by 1's to 50. • Count by 1's to 100. • Describe patterns when counting by 1's to 100. • Count by 10's to 100. • Count by 1's to 100, starting at any number.	



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, Number Chart 1-50 (Teaching Resource), counters, Number Chart 1-100 (Teaching Resource), connecting cubes, Double Ten Frames (Teaching Resource)

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 12 Assessment
- Performance Task
- Counting Portfolio Assessment



Lesson Plans

Lesson	Time Frame
Lesson 1 Count by 1s to 50 (12.1)	60 mins/1 day
Lesson 2 Count by 1s to 100 (12.2)	60 mins/1 day
Lesson 3 Count by 10s to 100 (12.3)	60 mins/1 day

Teacher Notes:

In this unit, students extend their counting skills to count to 100. Separate lessons are provided that focus on how to count by 1s through 50 and through 100. Students also develop an understanding of counting by 10s. Up to this point, students have only counted by 1s. They may not be familiar with the concept of counting by 10s.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 12.1 Count by 1s to 50 Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Counters, Number Chart 1-50 Teaching Resource, stampers, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Count by 1s to 50. - Count by 1s to 50 using the correct pronunciation of each numeral. - Discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	Lesson Sequence - Number Routine: Students build their counting skills. Students are shown a picture and must count the number of flowers shown. - Launch: Students observe a group of 50 fish to introduce the idea of counting a large group of objects. - Pose the Problem: Read the problem to students. - Develop the Math: Students count out 50 marks on a number chart. - Bring It Together: Given a number chart, students write the missing numbers. - Practice: On My Own page 151-152	- On My Own page 151-152 - Exit Ticket page 217



7. Reflect: Students complete the Reflect question.

Differentiation:

BL: Work with students in a small group. Provide them with the Number Chart 1-50 Teaching Resource. Have students start with the number 1 and count by 1s to 50. Take turns placing counters over the number as everybody counts aloud. When students reach 50, ask them how many counters they have. If students have trouble answering, remind them that the last number they said refers to how many they counted.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Counters, Number Chart 1-50 Teaching Resource, stampers
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 12.2 Count by 1s Time Frame: X hours/days
to 100

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Crayons, dry erase markers, Number Chart 1-100 Teaching Resource, plastic page protectors, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Count by 1s to 100. - Count by 1s to 100 using the correct pronunciation of each numeral. - Actively listen without interruption as peers describe how they approached a complex mathematical task.	Lesson Sequence - Number Routine: To help build their counting skills, students are shown a picture and must count the number of objects shown. - Launch: Students explore a picture of a quilt with 100 squares to introduce the idea of counting 100 objects. - Pose the Problem: Read the problem to students. - Develop the Math: Students mark numbers as they count on a number chart. - Bring It Together: Students write missing numbers in a given number chart.	- On My Own page 155-156 - Exit Ticket page 218



- | | | |
|--|---|--|
| | <ol style="list-style-type: none">6. Practice: On My Own
page 155-1567. Reflect: Students
complete the Reflect
question. | |
|--|---|--|

Differentiation:

BL: Work in a small group and give each student a copy of the Number Chart 1-100 Teaching Resource. Ask them to make a small crayon mark over each number as they count aloud together. Then talk about patterns they may see. If needed, suggest the following patterns: numbers increase by one when going right; there are ten numbers in each row; numbers increase as you move down the column.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Crayons, dry erase markers, Number Chart 1-100 Teaching Resource, plastic page protectors
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template

Content Area: Math Lesson Title: 12.3 Count by 10s Time Frame: 60 mins/1 day to 100

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Highlighter markers, Number Chart 1-100 Teaching Resource, small objects (e.g., buttons, counters, or coins), Zip-top bags, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Count by 10s to 100. - Count by 10s to 100 using the correct pronunciation of each numeral. - Practice strategies for persisting at a mathematical task, such as setting a small goal or setting timers for remaining focused.	Lesson Sequence Number Routine: Students are shown a picture and must count the number of bowling pins shown. Launch: Students think about counting by 10s to 100 as they explore a picture representing students holding sets of ten connecting cubes. Pose the Problem: Read the problem to students. Develop the Math: Students practice counting by 10s to 100 using bags with ten objects each. Bring It Together: Given connecting cubes grouped by tens, students	- On My Own page 161-162 - Exit Ticket page 219



	work together to choose the number that shows how many. 6. Practice: On My Own page 161-162 7. Reflect: Students complete the Reflect question.	
Differentiation: BL: Work with a small group and give each student a Number Chart 1-100 Teaching Resource. Have the group count how many squares are in each row. Give students different-colored highlighters. Count by tens aloud and have students highlight each row as you say the last number in the row. Help them see that they are counting ten at once. If students struggle to understand, have them count rows to verify that there are ten in each. AL: Assign the interactive lesson to reinforce targeted skills.		
Resources Provided: ● Highlighter markers, Number Chart 1-100 Teaching Resource, small objects (e.g., buttons, counters, or coins), Zip-top bags ● Student Reveal Math Workbook ● Exit Ticket		



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Count to 100
Created: April 2024	Board Approved on:	Type Here



Unit Overview Template

Content Area: Math **Grade Level:** Kindergarten **Unit Title:** Analyze, Compare, Compose & Compare Shapes

Unit Summary: Students develop understanding of using the attributes of 2- and 3 dimensional shapes to compare shapes; building and drawing shapes based on their defining attributes; composing shapes to form larger shapes; identifying solids in their environment; how length, height, weight and capacity of objects can be described; how to compare objects to see which is longer, taller, heavier, or holds more.

Primary Interdisciplinary Connections: *English Language Arts*

21st Century Themes ✕ Creativity and Innovation ✕ Critical Thinking and Problem Solving □ ICT Literacy
 □ Information Literacy ✕ Life and Career Skills ✕ Communication and Collaboration □ Media Literacy

Unit Rationale: In this unit, students compare, contrast, and create two- and three- dimensional shapes. Students draw two-dimensional shapes and build three- dimensional shapes. Students build on their earlier work sorting objects according to attributes to identify, describe, and compare measurable attributes of objects.

Career Readiness (Standard 9):

9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).

9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Learning Targets

Standards: K.M, K.G

Content Statements: Describe and compare measurable attributes; Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres); Analyze, compare, create, and compose shapes.

CPI#:	Cumulative Progress Indicator (CPI):
K.M.A	Describe and compare measurable attributes.
K.M.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.M.A.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.G.A	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.B	Analyze, compare, create, and compose shapes.



K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6	Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”
RL.K.1	With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).
RL.K.4	Ask and answer questions about unknown words in a text.
RL.K.10	Actively engage in group reading activities with purpose and understanding.
RI.K.1	With prompting and support, ask and answer questions about key details in a text.
SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
SEL.PK-12.1.1	Recognize one’s feelings and thoughts.
SEL.PK-12.1.4	Recognize the importance of self-confidence in handling daily tasks and challenges.
SEL.PK-12.2.2	Recognize the skills needed to establish and achieve personal and educational goals.
SEL.PK-12.3.1	Recognize and identify the thoughts, feelings, and perspectives of others.
SEL.PK-12.4.1	Develop, implement and model effective problem-solving, and critical thinking skills.

Unit Essential Questions:

- How can I tell how shapes are alike and different?
- How can I describe and compare the length, height, weight, and capacity of objects?

Unit Enduring Understandings:

Students develop understanding of

- Using the attributes of 2- and 3- dimensional shapes to compare shapes.
- Building and drawing shapes based on their defining attributes.
- Composing shapes to form larger shapes.
- How the length, height, weight, and capacity of objects can be described.
- How to compare objects to see which is longer, taller, heavier, or holds more.

Unit Learning Targets:

Students will....

- Explain how 2- and 3-dimensional shapes are alike and different.



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ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY GLOBAL SKILLS

- Build 2- and 3-dimensional shapes.
- Identify 3-dimensional shapes I see in the world.
- Describe objects using length, height, weight, and capacity.
- Compare two objects by their attributes.



Evidence of Learning

Summative Assessment: 2 days

Equipment Needed: Computer, projector, document camera, attribute blocks, number cubes 1-6, wooden geometric solids, 3-dimensional shapes, objects that can be described by length, height, weight, and capacity, balance scale, beans

Teacher Resources: Reveal Math Teacher Edition, Student Reveal Math Workbook

Formative Assessments:

- Exit Tickets
- Unit 13 Assessment
- Unit 14 Assessment
- Performance Task
- Shape Portfolio Assessment



Lesson Plans

Lesson	Time Frame
Lesson 1 Compare and Contrast 2-D Shapes (13.1)	60 mins/1 day
Lesson 2 Build and Draw 2D Shapes (13.2)	60 mins/1 day
Lesson 3 Describe Attributes of Objects (14.1)	60 mins/1 day

Teacher Notes:

In this unit, students compare, contrast, and create two- and three-dimensional shapes. They distinguish objects that are two-dimensional (flat) from those that are three-dimensional (solid). Students draw two-dimensional shapes and build three-dimensional shapes. They also identify three-dimensional shapes among the real-world objects around them.

Curriculum Development Resources/Technology Resources:

Click the links below to access additional resources used to design this unit:

my.mheducation.com



Lesson Plan 1 Template

Content Area: Math Lesson Title: 13.1 Compare and Contrast 2D Shapes Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Attribute blocks, index cards, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Compare and contrast 2D shapes based on defining attributes. - Use adjectives and nouns to compare 2D shapes. - Determine the strategies and analyses necessary to make informed decisions when engaging in mathematical practices.	Lesson Sequence Number Routine: Students complete a numerical pattern and then write a set of numbers of their own using the same pattern. Launch: Students will notice and wonder about the 2D shapes. Pose the Problem: Read the problem to students. Develop the Math: Students compare and contrast 2D shapes based on attributes of the shapes. Bring It Together: Students draw an X on the shape that is different from the first shape using its attributes to describe how it is different.	- On My Own page 181-182 - Exit Ticket page 235



- | | | |
|--|---|--|
| | <ol style="list-style-type: none">6. Practice: On My Own
page 181-1827. Reflect: Students
complete the Reflect
question. | |
|--|---|--|

Differentiation:

BL: Work with students in small groups. Put a pile of attribute blocks on the table. One student chooses an attribute block and shows it to the others. Other group members show a shape like that one. Students take turns justifying their choice. If group members have trouble choosing a like shape, ask the lead student to give a hint about their shape. Repeat the activity with each student getting a chance to lead.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Attribute blocks, index cards
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 2 Template

Content Area: Math Lesson Title: 13.2 Build and Draw 2D Shapes Time Frame: 60 mins/1 day

Lesson Components

21st Century Themes

☒ Global Awareness ☐ Financial, Economic, Business and Entrepreneurial Literacy
☐ Civic Literacy ☐ Health Literacy

21st Century Skills

☒ Creativity and Innovation ☒ Critical Thinking and Problem Solving ☐ Information Literacy
☐ Life and Career Skills ☒ Communication and Collaboration ☐ Media Literacy ☐ ICT Literacy

Interdisciplinary Connections: ELA

Integration of Technology: my.mheducation.com

Equipment Needed: Drawing tools, spinner, student Reveal Math Workbook, Exit Ticket.

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: • Draw 2D shapes. • Use commands to draw 2D shapes. • Collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	Lesson Sequence 1. Number Routine: Students build number sense as they count by 1s, starting at a given number and ending at a given number. Tell students to count aloud. Have them start at 56 and stop at 67. 2. Launch: Students will notice and wonder about the 2D shapes. 3. Pose the Problem: Read the problem to students. 4. Develop the Math: Students draw circles, squares, rectangles, triangles, and hexagons. 5. Bring It Together: As students work, discuss the attributes of triangles.	• On My Own page 187-188 • Exit Ticket page 236



- | | | |
|--|---|--|
| | <ol style="list-style-type: none">6. Practice: On My Own
page 187-1887. Reflect: Students
complete the Reflect
question. | |
|--|---|--|

Differentiation:

BL: Work with students in pairs. Have students sit back-to-back. One student gives a set of clues that describe a 2D shape. The other student draws the shape based on the clues he or she hears. When the drawing is finished, the student who gave the clues checks the drawing. Then students switch roles. If students have trouble drawing or describing the shape, then ask a student to tell one shape that is not.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Drawing tools, spinner
- Student Reveal Math Workbook
- Exit Ticket



Lesson Plan 3 Template					
Content Area:	Math	Lesson Title:	14.1 Describe Attributes of Objects	Time Frame:	60 mins/1 day
Lesson Components					
<u>21st Century Themes</u>					
☒ Global Awareness		☐ Financial, Economic, Business and Entrepreneurial Literacy			
☐ Civic Literacy		☐ Health Literacy			
<u>21st Century Skills</u>					
☒ Creativity and Innovation		☒ Critical Thinking and Problem Solving		☐ Information Literacy	
☐ Life and Career Skills		☒ Communication and Collaboration		☐ Media Literacy ☐ ICT Literacy	
Interdisciplinary Connections: ELA					
Integration of Technology: my.mheducation.com					
Equipment Needed: Cups of different sizes, objects that can be described by length, height, weight, and capacity, student Reveal Math Workbook, Exit Ticket.					

Goals/Objectives	Learning Activities/ Instructional Strategies	Formative Assessment Tasks
Students will: - Describe an object by measurable attributes, including length, height, weight, and capacity. - Use adjectives to describe objects by measurable attributes such as length, height, weight, and capacity. - Demonstrate thoughtful reflection through identifying the causes of challenges and successes while completing a mathematical task.	Lesson Sequence Number Routine: Students build fluency in counting forward from a given number within the known sequence. Have students count by ones starting at a given number and ending at a given number. Launch: Students observe a table with four pairs of similar objects that differ in measurable attribute. Pose the Problem: Read the problem to students. Develop the Math: Students examine objects and describe their attributes.	- On My Own page 215-216 - Exit Ticket page 253



- | | | |
|--|---|--|
| | <ol style="list-style-type: none"> 5. Bring It Together:
Students work together to choose an object. They also work together to describe the height and weight of their chosen object. For example, the fire truck is tall and heavy. The feather is short and light. 6. Practice: On My Own
page 215-216 7. Reflect: Students complete the Reflect question. | |
|--|---|--|

Differentiation:

BL: Work with a small group of students. Take two cups that can be compared using measurable attributes. Ask one student to describe the cups using height. Solicit other ideas about the cups' heights. Ask the next student to describe the cups using length, again soliciting other input. Repeat for weight and capacity. Emphasize that objects can be described using measurable attributes such as height, length, weight, and capacity.

AL: Assign the interactive lesson to reinforce targeted skills.

Resources Provided:

- Cups of different sizes, objects that can be described by length, height, weight, and capacity
- Student Reveal Math Workbook
- Exit Ticket



Lesson Reflection

Reflect on the lesson you have developed and rate the degree to which the lesson *Strongly*, *Moderately* or *Weakly* meets the criteria below.

Lesson Activities	Strongly	Moderately	Weakly
Are challenging Strongly and require higher order thinking and problem solving skills	X		
Allow for student choice		X	
Provide scaffolding for acquiring targeted knowledge/skills	X		
Integrate global perspectives		X	
Integrate 21st century skills	X		
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills	X		
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills	X		
Are varied to address different student learning styles and preferences	X		
Are differentiated based on student needs	X		
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process	X		
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives	X		
Provide opportunities for student reflection and self- assessment	X		
Provide data to inform and adjust instruction to better meet the varying needs of learners	X		

Curriculum Design Template

Content Area: Math	Grade Level: Kindergarten	Unit Title: Describe Attributes of Shapes
Created: April 2024	Board Approved on: Type Here	



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GLOBAL SKILLS

IEP AND 504 ACCOMMODATIONS AND MODIFICATIONS FOR EARLY CHILDHOOD AND ELEMENTARY SCHOOL STUDENTS:

Large print textbooks
Textbooks for at-home use
Additional time for assignments
Review of directions
Use of mnemonics
Have student restate information
Concrete examples
Adaptive writing utensils
Support auditory presentations with visuals
Use of a study carrel
Assistance in maintaining uncluttered space
Weekly home-school communication tools (notebook, daily log, phone calls or email messages)
Space for movement or breaks
Study sheets and teacher outlines
Extra visual and verbal cues and prompts
Math sheets with highlighted instructions
Graph paper to assist in organizing or lining up math problems
Use of computers and calculators
Books on tape
Graphic organizers
Quiet corner or room to calm down and relax when anxious
Preferential seating
Alteration of the classroom arrangement
Reduction of distractions
Answers to be dictated
Hands-on activities
Use of manipulatives
No penalty for spelling errors or sloppy handwriting
Follow a routine/schedule
Alternate quiet and active time
Teach time management skills
Rest breaks
Verbal and visual cues regarding directions and staying on task
Agenda book and checklists
Adjusted assignment timelines
Visual daily schedule



SPRINGFIELD PUBLIC SCHOOLS

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS**

Varied reinforcement procedures
Immediate feedback
Work-in-progress check
Personalized examples

TESTING AND ASSESSMENT ACCOMMODATIONS AND MODIFICATIONS:

Answers to be dictated
Frequent rest breaks
Additional time
Oral testing
Untimed tests
Choice of test format (multiple-choice, essay, true-false)
Alternate ways to evaluate (projects or oral presentations instead of written tests)
Accept short answers
Open-book tests
Read test and directions to student
Provide study outline prior to tests
Highlight key directions
Test in alternative site
Use of calculator
Extra credit option
Preview test procedures
Simplified test wording; rephrased test questions and/or directions

GENERAL ACCOMMODATIONS AND MODIFICATIONS:

Use of alternative books or materials on the topic being studied
Computerized spell-check support
Word bank of choices for answers to test questions
Provision of calculator and/or number line for math tests
Reworded questions in simpler language
Projects instead of written reports
Highlighting important words or phrases in reading assignments
Modified workload or length of assignments/tests
Modified time demands
Modified grades based on IEP

BEHAVIOR ACCOMMODATIONS MODIFICATIONS:



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**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS**

Breaks between tasks
Cue expected behavior
Daily feedback to student
Have contingency plans
Use de-escalating strategies
Use positive reinforcement
Use proximity/touch control
Use peer supports and mentoring
Model expected behavior by adults
Have parent sign homework
Have parent sign behavior chart
Set and post class rules
Chart progress and maintain data



SPRINGFIELD PUBLIC SCHOOLS

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS**

IEP AND 504 ACCOMODATIONS AND MODIFICATIONS FOR MIDDLE AND HIGH SCHOOL STUDENTS:

Large print textbooks
Textbooks for at-home use
Additional time for assignments
A locker with adapted lock
Review of directions
Review sessions
Use of mnemonics
Have student restate information
Provision of notes or outlines
Concrete examples
Adaptive writing utensils
Support auditory presentations with visuals
Weekly or bi-weekly home-school communication
Space for movement or breaks
Study sheets and teacher outlines
Extra visual and verbal cues and prompts
Lab and math sheets with highlighted instructions
Graph paper to assist in organizing or lining up math problems
Use of tape recorder for lectures
Use of Interactive notebook
Use of a scribe
Use of computers and calculators
Books on tape
Graphic organizers
Quiet corner or room to calm down and relax when anxious
Preferential seating
Alteration of the classroom arrangement
Reduction of distractions
Answers to be dictated
Hands-on activities
Ability to type all assignments
Follow a routine/schedule
Teach time management and organizational skills
Rest breaks
Verbal and visual cues regarding directions and staying on task
Agenda book and checklists
Daily check-in with case manager or special education teacher
Adjusted assignment timelines
Visual daily schedule



SPRINGFIELD PUBLIC SCHOOLS

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS**

Varied reinforcement procedures
Immediate feedback
Work-in-progress check
Personalized examples

TESTING AND ASSESSMENT ACCOMMODATIONS AND MODIFICATIONS:

Answers to be dictated
Frequent rest breaks
Additional time
Oral testing
Choice of test format (multiple-choice, essay, true-false)
Alternate ways to evaluate (projects or oral presentations instead of written tests)
Accept short answers
Open-book or open-note tests
Read test and directions to student
Provide study guides prior to tests
Highlight key directions
Test in alternative site
Use of calculator
Extra credit option
Pace long-term projects
Preview test procedures
Simplified test wording; rephrased test questions and/or directions

GENERAL ACCOMMODATIONS AND MODIFICATIONS:

Allow outlining, instead of writing for an essay or major project
Use of alternative books or materials on the topic being studied
Computerized spell-check support
Word bank of choices for answers to test questions
Provision of calculator for math tests
Film or video supplements in place of reading text
Reworded questions in simpler language
Projects instead of written reports
Highlighting important words or phrases in reading assignments
Modified workload or length of assignments/tests
Modified time demands



SPRINGFIELD PUBLIC SCHOOLS

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS**

Pass/no pass option

Modified grades based on IEP

BEHAVIOR ACCOMMODATIONS FOR STUDENTS:

- Breaks between tasks
- Cue expected behavior
- Daily feedback to student
- Have contingency plans
- Use de-escalating strategies
- Use positive reinforcement
- Use proximity/touch control
- Use peer supports and mentoring
- Model expected behavior by adults
- Have parent sign homework
- Set and post class rules
- Chart progress and maintain data



SPRINGFIELD PUBLIC SCHOOLS

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY
GLOBAL SKILLS

Accommodations and Modifications for ESL Students

- Give tests orally
- Give instructions/directions in writing and orally
- Assign a peer tutor, same language or English speaking
- Allow use of bilingual/translation dictionary
- Provide summaries of text or study guides of particular chapters
- Allow errors in speaking
- Allow errors in writing
- Accept writing in first language
- Highlight key vocabulary
- Reduce amount of work required
- Assess comprehension through demonstration or other alternative means (gestures, drawings)
- Rephrase questions, directions, and explanations
- Reduce multiple choices on assessments
- Provide study guides and/ or outlines
- Shorten reading assignments
- Allow extended time for test/project completion
- Use of audio books
- Use of graphic organizers
- Use reduced text, so that print is not dense
- Use visuals/pictures throughout lesson/unit/assignment
- Adapt homework to reflect language proficiency/home support
- Adapt homework to reflect home support
- Provide hands-on activities and explanations
- Allow extended time to answer questions, and permit drawing, as an explanation
- Use of translation dictionaries to locate words in the native language
- Use anecdotal records and portfolio of work as forms of assessment
- Use story retellings to assess comprehension

What Does the Gifted and Talented Experience Look Like? *Springfield Public Schools*

Mission Statement

The Gifted and Talented Program of the Springfield Public Schools aims to provide a meaningful and rigorous education that instills the value of lifelong learning and empowers all students to reach their full potential and become self-fulfilled creative leaders in accordance with the comprehensive standards of our state. We accomplish this by offering challenging, real-world experiences in a student-centered environment.

We recognize that students come from diverse socioeconomic, cultural, and ethnic backgrounds, and the mission of the gifted and talented program is to provide opportunities for students to explore their intellectual, creative, and artistic gifts and talents within the classroom and with beyond-the-classroom experiences. It is essential to provide diverse, appropriate, and ongoing learning experiences and environments that incorporate students' academic, psychological, and social needs. Our responsibility is to provide students with educational alternatives that teach, challenge, and expand their knowledge, while simultaneously stressing the development of independent and self-directed learners who continuously generate questions, analyze, synthesize, and evaluate information and ideas.

New Jersey Administrative Code 6A:8-3.1 defines students who are gifted and talented as those students who possess or demonstrate high levels of ability in one or more content areas when compared to their chronological peers in the local district and who require modification of their educational program if they are to achieve in accordance with their capabilities.

Goals:

To support our mission, we have established the following goals to guide our work:

- To infuse into the general education program a broad range of activities for high-level learning that will challenge all students to perform at advanced levels, and provide extended opportunities, resources, and support in particular areas where student interest or talent is demonstrated.
- To provide a continuum of gifted education services that will strengthen the total school program, offer enriching and challenging learning opportunities for all students, and provide specialized learning experiences
- To promote achievement of students' best potentials and increased ability.

Through a productive and collaborative relationship among the building principals, classroom teachers, and the Gifted and Talented teacher, our schools can create programming that will enhance the learning experience for every student and serve the unique and specialized needs of students currently demonstrating gifted behaviors.

Elements of the Schoolwide Enrichment Model, W.I.N (What I Need), differentiated instruction, advanced classes, or individual programs into a student's regular instruction program are integral to this overarching framework for gifted education in the Springfield School District.

Reference Board Policy and Regulation 2464 – Gifted and Talented Pupils (M)

Early Childhood Center **Edward V. Walton**

Schoolwide Virtual Enrichment

All first and second grade students have access to the [Gifted and Talented Virtual Classroom](#). This virtual classroom is a space for students to complete various challenges and enrichment opportunities at their own pace. Students can receive feedback and additional adaptable resources to meet their individual learning needs. The virtual classroom design expands accessibility to enrichment resources and allows students to choose learning activities according to their unique interests and abilities. The purpose of the activities is to encourage problem-solving, develop critical thinking

skills, and expand curiosity and imagination. Activities are aligned to the New Jersey Student Learning Standards.

Gifted and Talented Teacher as a Resource

The Gifted and Talented teacher serves as a resource to all teachers within Edward V. Walton School. Teachers seeking resources for their high-ability learners will receive additional support from the Gifted and Talented teacher in various ways. This support may include additional units of study, challenging resources, and student projects.

Elementary Schools **James Caldwell** **Thelma L. Sandmeier**

The goal is to engage small groups of students in intensive learning experiences through standards-based, rigorous, and relevant units of study that supplement, not supplant, the grade-level curriculum and support students' unique learning needs.

Enrichment Experience Grade 3

Beginning in third grade, the G&T teacher will cycle through all classrooms to work on problem-solving and enrichment tasks with students. Driven by assessment data, academic performance, student interest, and teacher observation, small groups of students will meet with the G&T teacher during W.I.N. (What I Need) periods throughout the week that the teacher is assigned to their classroom teacher. Groupings will be flexible and monitored to best meet each student's needs throughout the school year. Activities will include brain teasers, puzzles, strategic thinking, problem-solving, and STEM challenges.

Targeted Gifted and Talented Programing Grades 4-5

Students may become identified as Gifted and Talented in fourth grade. Students that are identified may receive support from the G&T Teacher for up to five periods (200 minutes) a week during W.I.N. (What I Need) periods. Identified students will meet to explore grade-level content while incorporating depth and complexity in a student-centered, problem-based environment. The Gifted and Talented Program aims to provide students with various advanced and challenging learning experiences across content areas to promote independent thinking skills, refine critical thinking and communication skills, cultivate joy in learning, and expand student interests through problem-solving. The instruction that students receive incorporates 21st Century Skills and advanced content that is challenging, hands-on, and relevant to the real world.

Strategies and Practices that Support Gifted and Talented Students

- Adjusted Pace of Lessons
- Inquiry-Based Instruction
- Higher-Order Thinking Activities
- Interest-Based Content
- Real World Problem Solving/Problem Based Learning
- Independent Study/Passion Projects
- Units of Study with Like-Minded Peers

Schoolwide Virtual Enrichment

All JCS and TLS students have access to grade level-specific [Gifted and Talented Virtual Classrooms](#). These virtual classrooms are a space for students to complete various challenges and enrichment opportunities at their own pace. Students are able to receive feedback and additional opportunities based on their needs. The virtual classrooms have expanded the accessibility of enrichment resources directly to the students and allows for students to choose opportunities according to their interests and abilities. The purpose of the activities is to encourage problem solving, develop critical thinking skills, and expand curiosity and imagination in conjunction with the New Jersey Student Learning Standards.

Gifted and Talented Teacher as a Resource

In addition to classroom support, the Gifted and Talented teacher also serves as a resource to all teachers in the building. Teachers that are seeking resources for their high ability learners will receive additional support from the Gifted and Talented teacher in various ways. This may include additional units of study, challenging resources, student projects, and meeting with the G&T teacher as needed.

Additional Enrichment Opportunities

Across all grade levels 3-5, as recommended by the classroom teacher, students exhibiting a need for additional enrichment may have the opportunity to meet with the G&T teacher as the schedule allows. Groupings will be flexible and monitored to best meet the students' needs throughout the school year. Activities will include, brain teasers, puzzles, strategic thinking activities, problem-solving challenges, and STEM challenges. Students engage in an extended process of asking questions, using resources, and developing answers that lead to thinking about what and how they are learning. Students are held accountable for how they work and use their time by demonstrating their learning through products or presentations.

Students self-select to participate in individual and/or group projects based on interest and commitment. The classroom teacher and/or the enrichment teacher will help guide and monitor student exploration of chosen topics, facilitating their learning with resources and teaching of needed skills.

Secondary Schools
Florence M. Gaudineer Middle School
Jonathan Dayton High School

Grades 6-12: Access to specific content programs with higher levels of academic challenges (i.e. Pre-Algebra, Accelerated Communication Arts, and Advanced Placement Classes)

Dual Credit Courses provide students the opportunity to obtain high school credit, and college credit, simultaneously through partnerships with several institutions.

Project Lead the Way (PLTW) students become builders of technology by engaging in real world activities. Students are empowered as design thinkers collaborating on real world projects.

Gifted and Talented Identification Criteria

The Springfield Schools Gifted and Talented Program recognizes that students require differentiated learning experiences beyond the core curriculum being taught because of their advanced abilities in one or more content areas. These students may also have other cognitive qualities such as curiosity, creativity, motivation, leadership, and passion that require modifications to their academic experience.

Multiple Measures of Eligibility

Kindergarten through grade twelve identification process for gifted and talented students includes multiple measures. Multiple measures may include but are not limited to: achievement test scores; grades; student performance or products; intelligence testing; parent, student, and/or teacher recommendation; and other appropriate measures. The identification methodology is developmentally appropriate, non-discriminatory, and related to the programs and services offered by the Springfield School District. The identification procedures are reviewed annually.

According to N.J.A.C. 6A:8-3.1, all public school districts must have a board-approved gifted and talented identification process and provide services for identified students enrolled in the grades of that school district. The regulations require that identification and services be made available to students in grades K-12.

When students are recommended for the Gifted and Talented Program there are multiple measures that are considered to determine if services are necessary and appropriate. The assessments used are as follows:

- Cognitive Abilities Test (CogAT)
- Classroom Performance/Student Portfolios
- DRA2 Level
- iReady Diagnostic Scores
- Gifted Indicators Checklist
- Start Strong/NJSLA Assessment Data

The N.J.A.C. requires that students be compared to their chronological peers in the local school district. The New Jersey Department of Education has not established state-level criteria for identifying students who are gifted, such as mandated tests or assessments, grade point averages, or IQ scores. Local school districts must use multiple measures to identify students.

Procedures

<https://www.straussesmay.com/seportal/Public/DistrictPolicy.aspx?policyid=2464&id=b8a33a9f505e4998a6db3fb8e1de778b>

Gifted and Talented Program Identification Matrix

Minimum Score Required for Consideration: 14 Points

1 Point	2 Points	3 Points
Cogat Assessment Overall Stanine Score of a 7	Cogat Assessment Overall Stanine Score of an 8	Cogat Assessment Overall Stanine Score of a 9
iReady Math Assessment Just Below Current Grade Level	iReady Math Assessment On Grade Level	iReady Math Assessment ½ Year + Above Current Level
iReady ELA On Grade Level	iReady ELA ½ Year Above Current Level	iReady ELA One Full Grade Level + Above Current Level
NJSLA Math Approaching Expectations	NJSLA Math Met Expectations	NJSLA Math Exceed Expectations
NJSLA ELA Approaching Expectations	NJSLA ELA Met Expectations	NJSLA ELA Exceed Expectations
HOPE Teacher Rating Scale Raw Score: 11 - 29	HOPE Teacher Rating Scale Raw Score: 30 - 49	HOPE Teacher Rating Scale Raw Score: 50-66

Team meetings present the opportunity to review data and assess the educational needs of all students. Teacher provides examples of student work exhibiting above and beyond grade level expectations, creativity, leadership, critical and abstract thinking. Programs for gifted and talented students will be periodically evaluated for their continuing efficacy and adjusted accordingly. The parent of any student identified as gifted or talented shall be consulted regarding any program designed to address the student's particular needs.

Resource Links

https://riversideinsights.com/cognitive_abilities_test

<https://www.curriculumassociates.com/programs/i-ready-learning>

<https://www.nj.gov/education/assessment/resources/>

<https://www.routledge.com/HOPE-Teacher-Rating-Scale-Involving-Teachers-in-Equitable-Identification/Gentry-Pereira-Peters-McIntosh-Fugate/p/book/9781618214522#:~:text=The%20HOPE%20Teacher%20Rating%20Scale,making%20it%20easy%20to%20use.>

Gifted and talented student: The “*[Strengthening Gifted and Talented Education Act](#)*” defines a gifted and talented student as a “student who possesses or demonstrates a high level of ability in one or more content areas when compared to their chronological peers in the school district and who require modifications of their educational program if they are to achieve in accordance with their capabilities.”

Twice-exceptional (2E) students: A twice-exceptional (2E) student is defined as “a student who is both gifted and a student with a disability. These students may also be referred to as having dual exceptionalities or as being gifted with learning disabilities (GT/LD). This also applies to students who are gifted with ADHD or gifted with autism” (New Jersey Association for Gifted Children, www.nagc.org).

Instructional adaptation: An adjustment or modification to instruction enabling a student who is gifted and talented to participate in, benefit from, and demonstrate knowledge and application of the New Jersey Student Learning Standards in one or more content areas at the instructional level of the student, not just the student's grade level.

Identifying gifted and talented students: The focus of identification is to provide programming and services in which students' specific learning needs and potential are appropriately addressed and met. In every New Jersey school district, there are students who require modifications to the general education curriculum if they are to achieve in accordance with their abilities. By identifying a student's general intellectual ability, creativity, or specific academic area aptitudes, we are acknowledging that they need programming and services outside of the general education/grade level curriculum to advance their learning.

NJDOE Fast Facts

<https://www.nj.gov/education/standards/gifted/>

<https://www.nj.gov/education/standards/gifted/legislation.shtml>

Supplemental Resources/Programming for Gifted Students

Edward V. Walton

- PETS Program – Primary Education Thinking Skills
- Group Solutions/Group Solutions 2 – Cooperative Logic Activities
- Lollipop Logic
- Beginning Thinking Skills
- AIMS Education Programming

James Caldwell and Thelma L. Sandmeier

Math/ELA

- Project M3: Mentoring Mathematical Minds
- Junior Great Books
- AIMS Education Programming
- Borenson Hands on Equations
- BizWorld
- Perplexors
- Advanced Math Explorations grade 3-5
- Challenging Units for Gifted Learners (ELA and Math)
- Creative Curriculum Extenders
- Differentiated Lessons & Projects
- Challenge Math Grades 4+
- Differentiating Instruction with Menus (All Content Areas)
- Jacob's Ladder
- Genius Hour/Passion Project
- Spatial Reasoning
- Logic Puzzles, Brain Games, Analogies

STEM

- Engineering is Elementary
- Engineer Throughout the Year
- PBS Design Squad
- DefinedSTEM
- Project Lead the Way (PLTW)

Enrichment Events

Experience for all students to be enriched through events related to the curricular or extracurricular activities. Examples include after school clubs, PTA-sponsored events, leadership opportunities, visual and performing arts, and community service opportunities.