Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Updated Fall 2018

All Belvidere Cluster curriculum and instruction areas are aligned to the New Jersey Student Learning Standards (NJSLS) in accordance with the NJ Department of Education's curriculum implementation requirements.

Interdisciplinary Connections

– English Language Arts
– Science and Scientific Inquiry (Next Generation)
– Social Studies
– Technology
– Visual and Performing Arts

Technology Standards and Integration
iPads
eSpark
Go Math online resources
Xtra Math
Interactive SmartBoard activities

NJSLA Technology
8.1.2.A.2
Create a document using a word processing application.
8.1.2.A.4
Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
8.1.P.B.1
Create a story about a picture taken by the student on a digital camera or mobile device.
8.1.P.C.1
Collaborate with peers by participating in interactive digital games or activities.
8.1.2.E.1
Use digital tools and online resources to explore a problem or issue.

CAREER EDUCATION (NJDOE CTE Clusters)

– Education & Training
– Finance
– Information Technology
– Science, Technology, Engineering & Mathematics (STEM)

21st Century Skills/ Themes

– Financial, Economic, Business and Entrepreneurial Literacy
– Creativity and Innovation

– Critical Thinking
– Problem Solving
– Communication
– Collaboration
– Information Literacy

CRP1. Act as a responsible and contributing citizen and employee.
CRP2. Apply appropriate academic and technical skills.
CRP3. Attend to personal health and financial well-being.
CRP4. Communicate clearly and effectively and with reason.
CRP5. Consider the environmental, social and economic impacts of decisions.
CRP6. Demonstrate creativity and innovation.
CRP7. Employ valid and reliable research strategies.
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9. Model integrity, ethical leadership and effective management.
CRP10. Plan education and career paths aligned to personal goals.
CRP11. Use technology to enhance productivity.
CRP12. Work productively in teams while using cultural global competence.

Integrated Accommodations and Modifications

Special Education

– Printed copy of board work/notes provided
– Additional time for skill mastery
– Assistive technology
– Behavior management plan
– Center-Based Instruction
– Check work frequently for understanding
– Computer or electronic device utilization
– Extended time on tests/ quizzes
– Have student repeat directions to check for understanding
– Highlighted text visual presentation
– Modified assignment format
– Modified test content
– Modified test format
– Modified test length
– Multiple test sessions
– Multi-sensory presentation
– Preferential seating
– Preview of content, concepts, and vocabulary
– Reduced/shortened written assignments
– Secure attention before giving instruction/directions
– Shortened assignments
– Student working with an assigned partner
– Teacher initiated weekly assignment sheet
– Use open book, study guides, test prototypes
– Cubing activities
– Exploration by interest
– Flexible grouping
– Goal setting with students
– Jigsaw
– Mini workshops to re-teach or extend skills Open-ended activities
– Think-Pair-Share
– Varied supplemental materials

ELL

– Allowing students to correct errors (looking for understanding)
– Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify
– allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning
– Allowing students to correct errors (looking for understanding)
– Allowing the use of note cards or open-book during testing
– Decreasing the amount of work presented or required
– Having peers take notes or providing a copy of the teacher's notes
– Modifying tests to reflect selected objectives
– Providing study guides
– Reducing the number of answer choices on a multiple choice test
– Tutoring by peers
– Explain/clarify key vocabulary terms

At Risk

– Allowing students to correct errors (looking for understanding)
– Teaching key aspects of a topic Eliminate nonessential information allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning
– Allowing students to select from given choices .
– Allowing the use of note cards or open-book during testing
– Collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test
– decreasing the amount of work presented or required .
– Having peers take notes or providing a copy of the teacher's notes
– Marking students' correct and acceptable work, not the mistakes
– Modifying tests to reflect selected objectives
– Providing study guides
– Reducing the number of answer choices on a multiple choice test
– Tutoring by peers
– Using authentic assessments with real-life problem-solving
– Using true/false, matching, or fill in the blank tests in lieu of essay tests
– using videos, illustrations, pictures, and drawings to explain or clarify
– Flexible grouping
– Goal setting with students
– Jigsaw
– Mini workshops to re-teach or extend skills Open-ended activities
– Think-Pair-Share
– Varied supplemental materials

Gifted and Talented

– Alternative formative and summative assessments
– Choice boards
– Games and tournaments
– Group investigations
– Independent research and projects Interest groups for real world application
– Learning contracts
– Leveled rubrics
– Multiple intelligence options

– Personal agendas
– Project-based learning
– Problem-based learning
– Stations/centers
– Think-Tac-Toes
– Tiered activities/assignments
– Tiered products

504
– Printed copy of board work/notes provided
– Additional time for skill mastery
– Assistive technology
– Behavior management plan
– Center-Based Instruction
– Check work frequently for understanding
– Computer or electronic device utilization
– Extended time on tests/ quizzes
– Have student repeat directions to check for understanding
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– Varied supplemental materials

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 1 Daily Routines

Title: Daily Routines

Grade Level: Kindergarten	**Length of Time:** Approximately 2 weeks

Unit Summary: This unit will introduce students to the Kindergarten daily routines. These routines will be used throughout the year to foster students' understanding of mathematics.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Counting and Cardinality

Cluster: Know number names and the count sequence.

Standard #:	**Standard:**
K.CC.1	Count to 100 by ones and by tens.

Domain: Measurement and Data

Cluster: Classify objects and count the number of objects in each category.

Standard # :	**Standard:**
K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Domain: Standards for Math Practice

Standard #	**Standard**
MP1	Making sense of problems and persevere in solving them.
MP2	Reason abstractly and quantitatively.
MP3	Construct viable arguments and critique the reasoning of others.
MP4	Model with mathematics.
MP5	Use appropriate tools strategically.
MP6	Attend to precision.
MP7	Look for and make use of structure.
MP8	Look for and express regularity in repeated reasoning.

Unit Essential Question:	**Unit Enduring Understandings:**
● How can you use numbers to help with daily classroom routines?	● Numbers can be used daily. ● Number sense develops through experience.

Unit Objective:

● Students will be able to participate daily in classroom routines that involve math.

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Graded Classwork
- Observation
- Chapter Tests
- Drawings

Possible Summative Assessment:

- Unit Checklist

Benchmark Assessments:	
● Go Math Benchmark	

• Unit Assessment	
Alternative Assessments: • Choice boards - projects • Skit • Student-created calendar	
Suggested Lesson Plans	
Lessons	**Timeframe**
Lesson #1: Calendar Routines	1 day
Lesson #2: Number of School Days	1 day
Lesson #3: Daily Schedule Routine	1 day
Lesson #4: Temperature & Weather	1 day
Lesson #5: Attendance Routine	1 day
Lesson #6: Lunch Routine	1 day
Lesson #7: Practice Routines	4 days
Curriculum Resources: • https://njctl.org/courses/math/kindergarten-math/calendar-math/ • Approved Classroom Resources	
Lesson Components	
21st Century Skills • Financial, Economic, Business, and Entrepreneurial Literacy 21st Century Themes • Critical Thinking and Problem Solving • Communication and Collaboration • Life and Career Skills	

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 2 Counting and Cardinality

Title: Counting and Cardinality

Grade Level: Kindergarten | **Length of Time:** Approximately 7 weeks

Unit Summary: This unit will allow students to gain an understanding of counting and numbers. It will also explore the various terminology that can be used to describe groups of items.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Counting and Cardinality

Cluster: Know number names and the count sequence.

Standard #s:	**Standard:**
K.CC.1	Count to 100 by ones and by tens.
K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.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).

Cluster: Count to tell the number of objects.

Standard #s:	**Standard:**
K.CC.4	Understand the relationship between numbers and quantities; connect counting to cardinality. 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. 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. c. Understand that each successive number name refers to a quantity that is one larger.
K.CC.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.

Cluster: Compare numbers.

Standard #s :	**Standard:**
K.CC.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.1
K.CC.7	Compare two numbers between 1 and 10 presented as written numerals.

Unit Essential Question:	**Unit Enduring Understanding:**
● Why is counting necessary? ● When do we need to compare numbers?	● Quantities can be counted and compared using words and numerals.

Unit Objectives:

- *Students will be able to count by fives, tens, twos and backwards. They will also be able to use ordinal numbers.*
- *Students will learn to count items in a total group, matching each object with one and only one number.*
- *Students will practice stroke formation and them numbers 0-9.*
- *Students will compare numbers and learn the proper terminology to describe groups of items.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Graded Classwork
- Homework
- Observation
- Chapter Tests
- Drawings

Possible Summative Assessment:

- Unit Checklist

Benchmark Assessments:	
• Go Math Benchmark • Unit Assessment	
Alternative Assessments:	
• Choice boards - projects • Skit • Student-created calendar	

Suggested Lesson Plans

Lessons	Timeframe
Lesson #1: Count Sequence Lab: RAFT-Sit Down Count	1 week
Lesson #2: Numbers 0-6 Lab: RAFT-Counting Towers	1 week
Lesson #3: Numbers 6-10 Lab: Raft-Hungry Bunnies	1 week
Lesson #4: Number Writing 0-10	2 weeks
Lesson #5: Comparing Numbers (One-to-one)	1 week
Lesson #6: Comparing Numbers (More, Less, Same, Least, Fewer, Greater Than, etc.)	1 week

Curriculum Resources:

- https://njctl.org/courses/math/kindergarten-math/counting-and-cardinality/
- http://www.raftbayarea.org/ideas/Sit%20Down%20Count.pdf
- http://www.raftbayarea.org/ideas/Counting%20Towers.pdf
- http://www.raftbayarea.org/ideas/Hungry%20Bunnies.pdf
- Approved Classroom Textbooks

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 3 Numbers in Base Ten 11-19

Title: Numbers in Base Ten

Grade Level: Kindergarten	**Length of Time:** Approximately 2 weeks

Unit Summary: This unit will allow students to gain an understanding of the numbers 11-19.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Counting and Cardinality

Cluster: Know number names and the count sequence.

Standard #:	**Standard:**
K.CC.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).

Cluster: Count to tell the number of objects.

K.CC.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.

Cluster: Compare numbers

K.CC.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.

Domain: Number & Operations in Base Ten

Cluster: Work with numbers 11-19 to gain foundations for place value.

Standard # :	**Standard:**
K.NB.1T	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 (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Unit Essential Questions:	**Unit Enduring Understandings:**
● How can we tell how much? ● How can we tell if objects are greater than, less than or equal to another group of objects?	● Groups of objects of 11-19 things can be grouped into one ten and ___ ones.

Unit Objectives:

- *Students will be able to identify the number of objects in a group up to 20.*
- *Students will be able to write the numbers up to 20.*
- *Students will decide is one group is greater than, less than or equal to the number of objects in a group.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Count the number of objects in a group
- Select the larger/smaller group
- Build a number using tens and ones
- Match number to group of items

Possible Summative Assessment:

- Unit Checklist
- Chapter test

Benchmark Assessments: ● Go Math Benchmark ● Unit Assessment	
Alternative Assessments: ● Choice boards - projects ● Skit ● Student-created calendar	

Suggested Lesson Plans	
Lessons	**Timeframe**
Lesson #1: Numbers 11-14 Lab: RAFT-Race to the Top	2 days
Lesson #2: Numbers 15-16	1 day
Lesson #3: Numbers 17-18	1 day
Lesson #4: Number 19 Lab: RAFT-Treasure Hunt	1 day
Lesson #5: Activities	3 days
Lesson #6: Reading and Writing 2 Digit Numbers	2 days

Curriculum Resources:

- http://njctl.org/courses/math/kindergarten-math/#
- http://www.raftbayarea.org/ideas/Race%20to%20the%20Top.pdf
- http://www.raftbayarea.org/ideas/Treasure%20Hunt.pdf
- Approved Classroom Textbooks

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 4 Data

Title: Data

Grade Level: Kindergarten	**Length of Time:** Approximately 3 weeks

Unit Summary: This unit will introduce students to sorting and classifying objects. They will be able to answer questions about charts and graphs as well as create them.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Measurement and Data

Cluster: Classify objects and count the number of objects in each category.

Standard #:	**Standard:**
K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit category counts to be less than or equal to 10.

Unit Essential Question:	**Unit Enduring Understandings:**
● How are objects classified?	● Charts and graphs are helpful ways to display data.

Unit Objectives:

- *Students will sort and classify objects into categories.*
- *Students will display data using tally charts, vertical graphs and horizontal graphs.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Graded Classwork
- Observations
- Homework
- Drawings

Possible Summative Assessment:

- Unit Test
- Chapter Tests

Benchmark Assessments:	
● Go Math Benchmark ● Unit Assessment	

Alternative Assessments:	
● Choice boards - projects ● Skit ● Student-created calendar	

Suggested Lesson Plans

Lessons	**Timeframe**
Lesson #1: Sorting Introduction	1 day
Lesson #2: Sorting by Color and Shape Lab: RAFT – Go Fish	1 day
Lesson #3: Sorting by Size	1 day
Lesson #4: Classifying Lab: Sorting Trays	1 day
Lesson #5: Venn Diagrams Lab: Fruitful Explorations	1 day

Lesson #6: Tally Charts	1 day
Lesson #7: Pictographs	1 day
Lesson #8: Vertical Graphs	1 day
Lesson #9: Horizontal Graphs	1 day
Lesson #10: Graphing Survey Data	2 days
Lesson #11: Graphing without Lines	1 day
Review & Unit Test	3 days

Curriculum Resources:

- http://njctl.org/courses/math/kindergarten-math/#
- http://www.raftbayarea.org/ideas/Go%20Fish.pdf
- http://www.raftbayarea.org/ideas/Sorting%20Trays.pdf
- http://www.raftbayarea.org/ideas/Fruitful%20Explorations.pdf
- Approved Classroom Texts

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 5 Measurement

Title: Measurement

Grade Level: Kindergarten | **Length of Time:** Approximately 4 weeks

Unit Summary: This unit will develop children's understanding of measurement and data. Students will compare various objects and be able to use words to describe the comparisons.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Measurement and Data

Cluster: Describe and compare measurable attributes.

Standard #:	**Standard:**
K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.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.*

Unit Essential Question:

- How can objects be compared?

Unit Enduring Understandings:

- Objects can be compared using words like: taller, shorter, more, less, heavier and lighter.

Unit Objectives:

- *Students will be able to compare objects using non-standard units and standard units.*
- *Students will be able to compare volumes as well as estimate how much volume a container can hold.*
- *Students will be able to compare the weights of different objects.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Observation
- Performance activities
- Build models using shapes
- Select the correct adjective

Possible Summative Assessment:

- Unit Test
- Performance assessment

Benchmark Assessments:

- Go Math Benchmark
- Unit Assessment

Alternative Assessments:

- Choice boards - projects
- Skit
- Student-created calendar

Lesson Plans

Lessons	**Timeframe**
Lesson #1: Introduction to Measuring	3 days
Lesson #2: Non-Standard Units	2 days

Lab: RAFT – Totally Tubular – Non Standard Measurements Section	
Lesson #3: Standard Units Lab: RAFT – Measure Up	3 days
Lesson #4: Comparing Volume	3 days
Lesson #5: How Much Can I Hold?	3 days
Lesson #6: More/Less Volume	2 days
Lesson #7: Weight	2 days
Review & Unit Test	2 days
Curriculum Resources: ● http://njctl.org/courses/math/kindergarten-math/# ● http://www.raftbayarea.org/ideas/Totally%20Tubular.pdf ● http://www.raftbayarea.org/ideas/Measure%20Up.pdf ● Approved Classroom Textbooks	

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 6 Operations & Algebraic Thinking

Title: Operations & Algebraic Thinking

Grade Level: Kindergarten	**Length of Time:** Approximately 5 weeks

Unit Summary: This unit will give students an opportunity to explore addition and subtraction and their meanings. After modeling addition and subtraction with both the Interactive White Board and manipulatives, students will be able to fluently add and subtract within 5. Various activities and games will also be used to deepen students' understandings.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Operations & Algebraic Thinking

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard #:	**Standard:**
K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.OA.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.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.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.5	Fluently add and subtract within 5.

Unit Essential Question:	**Unit Enduring Understandings:**
● Why do I need to add and subtract? ● What strategies can I use to add and subtract?	● Quantities can be combined or taken apart.

Unit Objectives:

- *Students will be able to show that addition is the putting together and subtraction is the taking apart of things.*
- *Students will be able to identify the addition, subtraction and equal signs.*
- *Students will be able to understand addition through addition patterns, counting on, and addition loops.*
- *Students will represent addition and subtract both horizontally and vertically.*
- *Students will be able to find a missing addend.*
- *Students will model subtraction with both pictures/ objects and connecting cubes.*
- *Students will be able to tell is a situation is representing addition or subtraction.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Use manipulatives to act out word problems

- Make a ten or doubles-fact
- Students will draw a picture to represent addition or subtraction number sentences

Possible Summative Assessment:

- Unit Checklist
- Chapter test
- Write a word problem

Benchmark Assessments: • Go Math Benchmark • Unit Assessment	
Alternative Assessments: • Choice boards - projects • Skit • Student-created calendar	

Suggested Lesson Plans	
Lessons	**Timeframe**
Part 1	
Lesson #1: Exploring Addition	2 days
Lesson #2: Plus Symbol	2 days
Lesson #3: Number Line Addition	1 day
Lesson #4: Equal Sign	1 day
Lesson #5: Tally Marks	1 day
Lesson #6: Addition Pattern (+1)	1 day
Lesson #7: Counting On	1 day
Lesson #8: Word Problems	1 days
Lesson #9: Addition Loops	1 day
Lesson #10: More Than One Way	2 days
Lesson #11: Vertical Addition	1 day
Lesson #12 Number Facts to 5 Lab: RAFT – Pick a Stick	1 day
Lesson #13: Missing Addend	1 day
Part 2	
Lesson #14: Exploring Subtraction	1 day
Lesson #15: Word Problems	1 day
Lesson #16: Modeling Subtraction	1 days
Lesson #17: Equal Sign	1 day
Lesson #18: Connecting Cubes	1 day
Lesson #19: Vertical Subtraction	1 day
Lesson #20: Number Facts to 5 Lab: RAFT – Pick a Stick	1 day
Lesson #21: Addition & Subtraction Games	1 day
Lesson #22: Addition & Subtraction Problem Solving	1 day

Curriculum Resources:

- https://njctl.org/courses/math/kindergarten-math/operations-and-algebraic-thinking/
- http://www.raftbayarea.org/ideas/Pick%20a%20Stick.pdf
- Approved Classroom Textbooks

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 7 Geometry and Patterns

Title: Geometry and Patterns

Grade Level: Kindergarten	**Length of Time:** Approximately 7 weeks

Unit Summary: This unit will students will learn the basic attributes of 2-D and 3-D shapes. They will also understand symmetry and equal parts. The unit will also have students both modeling and creating patterns.

Learning Targets

PARCC ■ Major Clusters; ■ Supporting Clusters; ○ Additional Clusters

Domain: Geometry

Cluster: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

Standard #s:	**Standard:**
K.G.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.2	Correctly name shapes regardless of their orientations or overall size.
K.G.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Cluster: Analyze, compare, create, and compose shapes.

Standard #s :	**Standard:**
K.G.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.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.6	Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*

Unit Essential Question:	**Unit Enduring Understandings:**
● How can our environment be described using positional words and shapes?	● Shapes can be described by naming them. ● Positional words describe our environments. ● 2-D and 3-D shapes can be compared and modeled.

Unit Objectives:

- *Students will use positional words to describe their environment.*
- *Students will describe 2-D and 3-D shapes.*
- *Students will paint to model symmetry.*
- *Students will model and created patterns.*

Evidence of Learning

Possible Formative Assessments:

- SMART Response questions used throughout the unit.
- Graded Classwork
- Homework
- Observation

<table>
<tr><td colspan="2">● Drawings</td></tr>
<tr><td colspan="2">Possible Summative Assessment:
● Unit Checklist</td></tr>
<tr><td>Benchmark Assessments:
● Go Math Benchmark
● Unit Assessment</td><td></td></tr>
<tr><td>Alternative Assessments:
● Choice boards - projects
● Skit
● Student-created calendar</td><td></td></tr>
<tr><td colspan="2">Suggested Lesson Plans</td></tr>
<tr><td>Lessons</td><td>Timeframe</td></tr>
<tr><td>Lesson #1: Positions</td><td>1 week</td></tr>
<tr><td>Lesson #2: 2-Dimensional Shapes
Lab: RAFT - Concentration
Lab: RAFT – Shape Lotto</td><td>1 week</td></tr>
<tr><td>Lesson #3: 3-Dimensional Shapes</td><td>1.5 weeks</td></tr>
<tr><td>Lesson #4: Symmetry</td><td>1 week</td></tr>
<tr><td>Lesson #5: Equal Parts</td><td>1 week</td></tr>
<tr><td>Lesson #6: Patterns
Lab: RAFT – Green, Yellow, Yellow</td><td>1.5 weeks</td></tr>
<tr><td colspan="2">Curriculum Resources:
● https://njctl.org/courses/math/kindergarten-math/geometry-and-patterns/
● http://www.raftbayarea.org/ideas/Concentration.pdf
● http://www.raftbayarea.org/ideas/Shape%20Lotto.pdf
● http://www.raftbayarea.org/ideas/Green%20Yellow%20Yellow.pdf
● Approved Classroom Textbooks</td></tr>
</table>

Belvidere Cluster Wide
Mathematics Curriculum
Kindergarten
Unit Plan # 8 Optional - Exploring Time and Money

Title: Exploring Time and Money

Grade Level: Kindergarten	**Length of Time:** Approximately 2 weeks

Unit Summary: This unit will introduce students to pennies, nickels and dimes. They will also can an initial understanding of the clock.

Learning Targets

Standards: Time and Money are assessed at later grade levels.

Unit Essential Questions:	**Unit Enduring Understandings:**
● How is money used to purchase items? ● How can we use time to describe events?	● Knowing the names for coins and their value is an essential life skill. ● Telling time is an essential life skill

Unit Objectives:

- *Students will be able to distinguish between penny, nickels and dimes.*
- *Students will understand morning, afternoon and evening.*
- *Students will be able to sequence events.*
- *Students will be able to compare two activities and determine which takes more/less time.*
- *Students will gain an initial understanding of the clock.*

Evidence of Learning

Formative Assessments:

- SMART Response questions used throughout the unit.

Summative Assessment:

- Unit Checklist

Benchmark Assessments:

- Go Math Benchmark
- Unit Assessment

Alternative Assessments:

- Choice boards - projects
- Skit
- Student-created calendar

Suggested Lesson Plans

Lessons	Timeframe
Lesson #1:Money & Comparing Coins	1 day
Lesson #2:Penny	1 day
Lesson #3:Nickel	1 day
Lesson #4:Dime	1 day
Lesson #5:Combination of Coins	1 day
Lesson #6:Morning, Afternoon, Evening	½ day
Lesson #7:Sequence	½ day
Lesson #8: Seasons	1 day
Lesson #9:Measuring Time	1 day
Lesson #10:Tools for Measuring Time Lab: RAFT- Sand Timer Primer"	1 day
Lesson #11:Time Problem Solving	1 day

Curriculum Resources:

- http://njctl.org/courses/math/kindergarten-math/#
- http://www.raftbayarea.org/ideas/Sand%20Timer%20Primer.pdf