

**WEYMOUTH TOWNSHIP MATHEMATICS
CURRICULUM**

Content Area: Mathematics

Course Title: Elementary

Grade Level: First

**Unit 1 Plan:
Operations and Algebraic Thinking**

**September-October
ongoing**

**Unit 2 Plan:
Numbers and Operations in Base Ten**

**November-December-January
ongoing**

**Unit 3 Plan:
Measurement and Data**

**February-March-April
ongoing**

**Unit 4 Plan:
Geometry**

**May-June
ongoing**

Date Created:
July 2022

Board Approved on:
August 2023

First Grade Mathematics Curriculum
Unit 1: Operations and Algebraic Thinking

Unit Overview

The first grade Operations and Algebraic Thinking unit focuses on fundamental mathematical concepts related to addition and subtraction. Equations and the symbols that are used to read and write them are introduced in this unit. Students learn how to add and subtract numbers within 20 and develop a solid understanding of basic arithmetic operations. They also explore patterns, sequences, and relationships between numbers, which forms the basis of early algebraic thinking. Experiences will serve to build an understanding of the relationship between addition and subtraction and the function of that relationship in finding missing addends. The unit aims to help students build a strong foundation in mathematical problem-solving and critical thinking skills.

New Jersey Student Learning Standards

The learning in this unit will focus on Operations and Algebraic Thinking

Standard MA 1.OA

Strands A.1, A.2, B.3, B.4, C.5, C.6, D.7, D.8

Content Statements:

MA 1.OA.A Represent and solve problems involving addition and subtraction.

MA 1.OA.B Understand and apply properties of operations and the relationship between addition and subtraction

MA 1.OA.C Add and subtract within 20

MA 1.OA.D Work with addition and subtraction equations

Instructional Focus

- Representation and solving of problems involving addition and subtraction.
 - Application of properties of operations and the relationship to addition and subtraction.
 - Introduction to equations.
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Essential Questions:

- How do you decide which operation to use when solving a problem?
- What is an equation? What do the symbols in an equation represent?
- How does the order of the numbers affect the result in subtraction?
- How does the order of the addends affect the sum?
- How are addition and subtraction related?
- How does understanding the relationship between addition and subtraction help you to find missing addends?

Student Learning Objectives:

MA 1.OA.A1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

- The learner will be able to represent a word problem using objects, drawings, or equations using a symbol for the unknown
- The learner will be able to solve addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions
-

MA 1.OA.A2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

- The learner will be able to solve addition word problems with three whole numbers with a sum of 20 or less using objects, drawings or equations with symbols for the unknown

MA 1.OA.B.3 Apply properties of operations as strategies to add and subtract. The learner will be able to apply the commutative and identity properties as strategies to add and subtract

MA 1.OA.B.4 Understand subtraction as an unknown-addend problem.

- The learner will be able to subtraction can be thought of as an addition problem with an unknown addend
- The learner will understand that a related addition problem can be used to solve a subtraction problem

MA 1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)

- The learner will be able to relate counting to addition
- The learner will be able to relate counting to subtraction

MA 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

- The learner will be able to add and subtract within 20 using strategies such as counting on, making ten, and decomposing a number leading to a ten
- The learner will be able to add and subtract within 20 using strategies such as relationship between addition and subtraction, and using easier or known sums within 10
- The learner will work towards accuracy and efficiency for addition and subtraction within 10, using efficient strategies to add and subtract within 20

MA 1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.*

- The learner will understand that an equal sign means both sides of the equal sign have the same value in an addition or subtraction equation within 10
- The learner will be able to determine if equations involving addition and subtraction within 10 are true or false

MA 1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.

- The learner will determine the missing number (in any position) that makes an equation within 20 true

Suggested Activities

Big Ideas Introduction videos
 graphic organizers
 flash cards
 XtraMath
 Prodigy Online Math Practice
 Stem Videos
 Big Ideas Game Library

Instructional Materials/Resources

Big Ideas Math Modeling Real Life Student Edition
 Big Ideas Resources by Chapter
 Vocabulary Cards
 Math references and resource folder
 Number Line
 Linking cubes
 math terms word wall
 teacher made materials
 instructional videos
 whiteboards and markers
 two-color counters
 part-part-whole mat
 number lines
 fact family triangle cards
 bar model graphic organizer
 ten frames

Pacing: approximate number of class periods: 65

Interdisciplinary Connections

Language Arts Literacy

L.1.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).

W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a questions

RF.1.4. Read with sufficient accuracy and fluency to support comprehension

RF.1.4.A. Read grade-level text with purpose and understanding.

RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text

RI.1.7. Use illustrations and details in a text to describe its key details.

RL.1.1. Ask and answer questions about key details in a text.

SL.1.1.A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood

SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Other Interdisciplinary Connections

Integration of Technology

TECH.8.1.2.A.CS2 - Select and use applications effectively and productively.

21st Century Life and Career Skills

	CRP1. Act as a responsible and contributing citizen and employee.
x	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
x	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
x	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
x	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.
x	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
End-of-Chapter Assessments Performance Assessment Cumulative Assessments Unit projects	Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Lesson Review questions Share/Pair Skills Practice Study Guide	Teacher Observation Unit Review Vocabulary Review Graphic Organizers Homework and Practice pages Content Videos Prodigy online skills practice

Instructional Delivery
<p>Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:</p> <ul style="list-style-type: none"> ● Direct instruction/demonstration ● Interactive/Guided reading strategies ● Cooperative learning activities ● Digital activities including videos, games, assessments ● Small Group Instruction ● Share Examples ● Visual Aids ● Learning Centers ● Modeled, Shared, and Independent Activities ● Active Learning ● Literature Activities ● Art Projects ● Science integration

Differentiated Instruction, Accommodations & Adaptations
<p>Guided Reading -Leveled Readers Alternative Assessments Goal Setting with Students Homework Options Frequent Breaks Tests Read Aloud Cooperative Learning Picture Vocabulary Wall Anchor Charts of Concepts Change in Content, Process, Product Flexible Grouping Modified Class Assignments Organizational Support Reference folder Manipulatives</p>

Special Education/IEP	504
<p>Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts</p>	<p>Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers</p>
ELL	Gifted & Talented
<p>Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts</p>	<p>Big Ideas Rich Task Assignments Independent extension research projects Jigsaw cooperative learning activities Student choice Prodigy.com Code.org</p>
I&RS/At Risk	
<p>Assessments/assignments differentiated, process, product, content Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts</p>	

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>
 XtraMath https://xtramath.org/?authuser=0#/signin/student_other
 Prodigy <https://www.prodigygame.com/>

First Grade Mathematics Curriculum
Unit 2: Numbers and Operations in Base Ten

Unit Overview

The first grade Numbers and Operation in Base Ten Unit provides students experiences with the foundational concepts of the base-ten number system. This unit guides students to develop a deep understanding of place value, the value of each digit in a number, and the relationship between digits and their positions within a number. Students will explore two-digit numbers and learn to decompose them into tens and ones. They will compare and order these numbers. Learners will practice counting by ones, tens, and other increments, strengthening their number sense and understanding of groups. Basic addition and subtraction problems within 100 will be introduced, emphasizing the concept of regrouping. Students will use concrete materials, such as base-ten blocks, to model and manipulate numbers to reinforce the understanding of place value.

New Jersey Student Learning Standards

The learning in this unit will focus on Operations and Algebraic Thinking

Standard MA 1.NBT

Strands A.1, B.2, B.3, C.4, C.5, C.6

Content Statements:

MA 1.NBT.A Extend the counting sequence

MA 1.NBT.B Understand place value

MA 1.NBT.C Use place value understanding and properties of operations to add and subtract

Instructional Focus

Essential Questions:

- **How can you compare two-digit numbers using the symbols for greater than, less than, and equal to?**
- **Can you identify the place value of a given digit in a two-digit number?**
- **How can you use base-ten strategies to solve addition and subtraction word problems involving two-digit numbers?**
- **How do you count by tens and ones from any given two-digit number?**
- **How can you represent word problems using base-ten drawings or models to help you solve them?**
- **Can you explain how you can add and subtract tens and ones separately to find the sum or difference of two-digit numbers?**

Student Learning Objectives:

MA 1.NBT.A1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

- The learner will be able to count to 120
- The learner will be able to count on from any number within 120
- The learner will be able to read numbers within 50
- The learner will be able to write numbers within 50
- The learner will be able to represent up to 50 objects with a written number

MA 1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.

- The learner will understand that 10 can be thought of as a bundle of ten ones called a “ten”
- The learner will understand that the numbers 11 to 19 are made up of one ten and one, two, three, four, five, six, seven, eight, or nine ones

MA 1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

- The learner will be able to compare two two-digit numbers using the meanings of the tens and ones digits
- The learner will be able to compare two numbers using the symbols $<$, $>$, and $=$

MA 1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

- The learner will understand that sometimes it is necessary to compose tens when adding
- The learner will be able to compose tens when adding two-digit numbers, if necessary
- The learner will understand that when adding two-digit numbers, one adds tens and tens, ones and ones
- The learner will understand that 10, 20, 30, 40, 50, 60, 70, 80, and 90 are multiples of 10
- The learner will be able to add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten blocks) or drawings
- The learner will be able to a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction
- The learner will be able to relate strategies for adding a two-digit and a one-digit number within 100 to a written method and explain the reasoning used to solve
- The learner will be able to add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings
- The learner will be able to add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction
- The learner will be able to relate strategies for adding a two-digit number and a multiple of 10, within 100, to a written method and explain the reasoning used to solve

MA 1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

- The learner will be able to mentally find 10 more or 10 less than any given two-digit number, without having to count
- The learner will be able to explain how to mentally find 10 more or 10 less than any given two-digit number

MA 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

- The learner will be able to multiples of 10 from multiples of 10 using concrete models or drawings (multiples of 10 less than or equal to 90)
- The learner will be able to subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)
- The learner will be able to subtract multiples of 10 from multiples of 10 using the relationship between addition and subtraction (multiples of 10 less than or equal to 90)
- The learner will be able to relate the strategy used to subtract multiples of 10 from multiples of 10 to a written method
- The learner will be able to explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)

Suggested Activities	Instructional Materials/Resources
Big Ideas Introduction videos graphic organizers flash cards XtraMath Prodigy Online Math Practice Stem Videos Big Ideas Game Library	Big Ideas Math Modeling Real Life Student Edition Big Ideas Resources by Chapter Vocabulary Cards Student math references and resource folder Number Line Linking cubes math terms word wall teacher made materials instructional videos whiteboards and markers two-color counters number lines bar model graphic organizer ten frames
Pacing: approximate number of class periods: 50	

Interdisciplinary Connections

Language Arts Literacy

L.1.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).

W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a questions

RF.1.4. Read with sufficient accuracy and fluency to support comprehension

RF.1.4.A. Read grade-level text with purpose and understanding.

RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text

RI.1.7. Use illustrations and details in a text to describe its key details.

RL.1.1. Ask and answer questions about key details in a text.

SL.1.1.A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood

SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Other Interdisciplinary Connections

Integration of Technology -

TECH.8.1.2.A.CS2 - Select and use applications effectively and productively.

21st Century Life and Career Skills

	CRP1. Act as a responsible and contributing citizen and employee.
x	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
x	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.
x	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.
x	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
End-of-Chapter Assessments Performance Assessment Cumulative Assessments Unit Projects	Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Lesson Review questions Share/Pair Skills Practice Study Guide	Teacher Observation Unit Review Vocabulary Review Graphic Organizers Homework and Practice pages Content Videos Prodigy online skills practice

Instructional Delivery

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- Direct instruction/demonstration
- Interactive/Guided reading strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning
- Literature Activities
- Art Projects
- Science integration

Differentiated Instruction, Accommodations & Adaptations

Guided Reading -Leveled Readers
Alternative Assessments
Goal Setting with Students
Homework Options
Frequent Breaks
Tests Read Aloud
Cooperative Learning
Picture Vocabulary Wall
Anchor Charts of Concepts
Change in Content, Process, Product
Flexible Grouping
Modified Class Assignments
Organizational Support
Reference folder
Manipulatives

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers

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I&RS/At Risk	
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Internet Resources

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Unit 3: Measurement and Data

Unit Overview

The first grade Measurement Unit introduces fundamental concepts related to measuring, collecting data, and understanding time. Students will learn the basics of measuring length, such as comparing and ordering objects by size and using non-standard objects to measure. They will also explore the concept of time, including understanding the hands on a clock and reading digital and analog clocks to the hour or half hour.

In terms of data, first grade students will be introduced to simple data collection and representation, learning to organize and interpret data using graphs and charts. The unit will involve real world data collection and hands-on experiences constructing and explaining various graphs.

New Jersey Student Learning Standards

The learning in this unit will focus on Measurement and Data

Standard MA 1.MD

Strands A.1, A.2, B.3, C.4,

Content Statements:

MA 1.MD.A Measure lengths indirectly and by iterating length units

MA 1.MD.B Tell and write time

MA 1.MD.C Represent and interpret data

Instructional Focus

Essential Questions:

- How can we organize and represent data using tally charts, bar graphs, and pictographs?
- How do we interpret data from graphs to answer questions and make conclusions?
- How can we compare the length, height, and width of objects using non-standard units (e.g., paper clips, cubes)?
- What is measurement, and why do we need to measure things in our daily lives?
- How do we tell time to the hour or half hour using a digital clock?
- How do we tell time to the hour or half hour using an analog clock?

Student Learning Objectives:

MA 1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object

- The learner will be able to length is measured from one endpoint to another
- The learner will be able to use a third object to compare lengths of two objects that may not be moved
- The learner will be able to order three objects by length

MA 1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

- The learner will recognize the length of an object is the number of same-size length units that span it with no gaps or overlaps
- The learner will be able to express the length of an object as a whole number of length units, by laying multiple copies of a shorter object end to end

MA 1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.

- The learner will be able to tell and write time to the hour using analog and digital clock

MA 1.OA.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

- The learner will be able to organize and represent data with up to three categories
- The learner will be able to interpret data with up to three categories by stating observations about the data
- The learner will be able to ask and answer questions about the total number of data points, the number in each category, and how many more or less are in one category than in another

Suggested Activities

Big Ideas Introduction videos
graphic organizers
flash cards
XtraMath
Prodigy Online Math Practice
Stem Videos
Big Ideas Game Library

Instructional Materials/Resources

Big Ideas Math Modeling Real Life Student Edition
Big Ideas Resources by Chapter
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Linking cubes
math terms word wall
teacher made materials
instructional videos
whiteboards and markers
object to compare lengths
string
color tiles
Judy Clocks

Pacing: approximate number of class periods: 30

Interdisciplinary Connections

Language Arts Literacy

L.1.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).

W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a questions

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RF.1.4.A. Read grade-level text with purpose and understanding.

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Integration of Technology

TECH.8.1.2.A.CS2 - Select and use applications effectively and productively.

21st Century Life and Career Skills

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	CRP10. Plan education and career paths aligned to personal goals.
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Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
Unit Pretest Unit Project Unit Test Performance Assessment	Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Lesson Review questions Share/Pair Skills Practice Study Guide	Teacher Observation Unit Review Vocabulary Review Graphic Organizers Homework and Practice pages Content Videos Prodigy online skills practice

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Differentiated Instruction, Accommodations & Adaptations

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ELL	Gifted & Talented
Picture study guides Video presentation/Audio presentation	Independent extension research projects Jigsaw cooperative learning activities

<p>Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts</p>	<p>Student choice Prodigy.com Code.org</p>
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Internet Resources

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 XtraMath https://xtramath.org/?authuser=0#/signin/student_other
 Prodigy <https://www.prodigygame.com/>

Unit Overview

The first grade Geometry Unit focuses on basic geometry concepts and the concept of equal sharing. In the first part of the unit, students will explore two-dimensional shapes. They will learn to identify, name, and describe these shapes based on their attributes, such as the number of sides and corners, or as an open or closed figure. Next, the focus will shift to three-dimensional shapes. Students will understand that three-dimensional shapes have depth or volume and identify their properties. The second aspect of the unit will cover the concept of equal sharing. Students will learn how to divide objects, sets, or quantities into equal parts. They will model fourths (or quarters) and halves.

New Jersey Student Learning Standards

The learning in this unit will focus on Geometry

Standard MA 1.G

Strands A.1, A.2, A.3

Content Statement:

MA 1.G.A Reason with shapes and their attributes

Essential Questions:

- How can you use shapes to understand basic concepts of fractions, like halves or quarters?
- How can you use geometric shapes to create a simple map of the classroom or playground?
- How can you sort shapes based on their attributes, such as the number of sides or corners?
- How do you know if a shape is a square, rectangle, circle, triangle, or other shape? What are the defining characteristics of each shape?
- How can we fairly divide objects or groups into equal shares?

Student Learning Objectives:

MA 1.G.A1 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

- The learner will be able to distinguish between defining and non-defining attributes
- The learner will be able to build and draw shapes that have particular defining attributes

MA 1.G.A2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

- The learner will recognize a composite shape is a shape built by combining other shapes
- The learner will be able to compose three-dimensional shapes (cubes, rectangular prisms, cones, and cylinders) to create a composite shape
- The learner will be able to compose new shapes from composite shapes

MA 1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

- The learner will be able to partition means to split a shape into smaller parts, also called shares
- The learner will be able to partition circles and rectangles into two equal shares and describe each share using the word “halves” or the phrase “half of”
- The learner will be able to partition circles and rectangles into four equal shares and describe each share using the word “fourths” or the phrase “fourth of” decomposing shapes into more equal shares creates smaller shares

Suggested Activities	Instructional Materials/Resources
Big Ideas Introduction videos graphic organizers flash cards XtraMath Prodigy Online Math Practice Stem Videos Big Ideas Game Library	Big Ideas Math Modeling Real Life Student Edition Big Ideas Resources by Chapter Vocabulary Cards Math references and resource folder Number Line Linking cubes math terms word wall teacher made materials instructional videos whiteboards and markers color tiles 3D shape models 2D shape manipulatives Pattern blocks
Pacing: approximate number of class periods: 25	

Interdisciplinary Connections

Language Arts Literacy

L.1.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).

W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a questions

RF.1.4. Read with sufficient accuracy and fluency to support comprehension

RF.1.4.A. Read grade-level text with purpose and understanding.

RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text

RI.1.7. Use illustrations and details in a text to describe its key details.

RL.1.1. Ask and answer questions about key details in a text.

SL.1.1.A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood

SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Other Interdisciplinary Connections

Social Studies Geography: A map is a symbolic representation of selected characteristics of a place.

Integration of Technology

TECH.8.1.2.A.CS2 - Select and use applications effectively and productively.

21st Century Life and Career Skills

	CRP1. Act as a responsible and contributing citizen and employee.
x	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
x	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.
x	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.
x	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
Unit Pretest Unit Project Unit Test Performance Assessment	Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Lesson Review questions Share/Pair Skills Practice Study Guide	Teacher Observation Unit Review Vocabulary Review Graphic Organizers Homework and Practice pages Content Videos Prodigy online skills practice

Instructional Delivery

Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:

- Direct instruction/demonstration
- Interactive/Guided reading strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning
- Literature Activities
- Art Projects
- Science integration

Differentiated Instruction, Accommodations & Adaptations

Guided Reading -Leveled Readers
Alternative Assessments
Goal Setting with Students
Homework Options
Frequent Breaks
Tests Read Aloud
Cooperative Learning
Picture Vocabulary Wall
Anchor Charts of Concepts
Change in Content, Process, Product
Flexible Grouping
Modified Class Assignments
Organizational Support
Reference folder
Manipulatives

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers

ELL	Gifted & Talented
Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Independent extension research projects Jigsaw cooperative learning activities Student choice Code.org Prodigy.com
I&RS/At Risk	
Assessments/assignments differentiated, process, product, content Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>
 XtraMath https://xtramath.org/?authuser=0#/signin/student_other
 Prodigy <https://www.prodigygame.com/>