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<td>3.NBT.A</td>
<td></td>
<td>Use place value understanding and properties of operations to perform multi-digit arithmetic</td>
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<td>Major</td>
<td>3.MD.A</td>
<td></td>
<td>Geometric measurement: understand concepts of area and relate to multiplication and addition</td>
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<tr>
<td></td>
<td>Additional</td>
<td>3.MD.C</td>
<td></td>
<td>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures</td>
</tr>
<tr>
<td></td>
<td>Supporting</td>
<td>3.G.A</td>
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<td>Reason with shapes and their attributes</td>
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<table>
<thead>
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<th>Marking Period 3</th>
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<tbody>
<tr>
<td>5</td>
<td>Major</td>
<td>3.OA.A</td>
<td></td>
<td>Represent and solve problems multiplication and division</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.B</td>
<td></td>
<td>Understand properties of multiplication and the relationship between multiplication and division</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.C</td>
<td></td>
<td>Multiply and Divide within 100</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.D</td>
<td></td>
<td>Solve problems involving the four operations and identify and explain patterns in arithmetic</td>
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<td>6</td>
<td>Major</td>
<td>3.NF.A</td>
<td></td>
<td>Develop understanding of fractions as numbers</td>
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<tr>
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<td>Supporting</td>
<td>3.G.A</td>
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<td>Reason with shapes and their attributes</td>
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<th>Unit</th>
<th>Standard Type</th>
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<tr>
<td>7</td>
<td>Major</td>
<td>3.OA.D</td>
<td></td>
<td>Solve problems involving the four operations and identify and explain patterns in arithmetic</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.MD.A</td>
<td></td>
<td>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects</td>
</tr>
<tr>
<td></td>
<td>Additional</td>
<td>3.NBT.A</td>
<td></td>
<td>Use place value understanding and properties of operations to perform multi-digit arithmetic</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.A</td>
<td></td>
<td>Represent and solve problems involving multiplications and division</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.B</td>
<td></td>
<td>Understand properties of multiplication and the relationship between multiplication and division</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.C</td>
<td></td>
<td>Multiply and Divide within 100</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>3.OA.D</td>
<td></td>
<td>Solve problems involving the four operations and identify and explain patterns in arithmetic</td>
</tr>
</tbody>
</table>
## Unit 1: Understanding Equal Groups: Multiplication and Division 1

### Cluster Standards
- **3.OA.A** Represent and solve problems involving multiplication and division
- **3.OA.B** Understand properties of multiplication and the relationship between multiplication and division
- **3.OA.C** Multiply and Divide within 100
- **3.OA.D** Solve problems involving the four operations, and identify and explain patterns in arithmetic

### Focus Mathematical Practices
- **MP1**: Make sense of problems and persevere
- **MP8**: Look for and express regularity in repeated reasoning

### Main Math Ideas
- Understanding the meaning of multiplication
- Understanding and working with an array/area model of multiplication
- Learning the multiplication facts
- Developing strategies for division based on understanding the inverse relationship between multiplication and division

### Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes in Sessions 2.6, 3.7, 4.5
- Checklists in Sessions 2.3, 2.4, 2.5, 3.2, 3.3, 3.4

**Summative:**
- Pearson Unit 1 Assessment

**Additional Standards Based:**
- Study Island
<table>
<thead>
<tr>
<th><strong>Unit 1: Investigation 1: Things That Come in Groups</strong></th>
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<tr>
<td><strong>Primary Teaching Resources from Investigations: Sessions 1.1-1.4</strong></td>
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<tr>
<td><strong>NJSLS addressed in Investigation 1</strong></td>
<td><strong>I Can Statements</strong></td>
</tr>
<tr>
<td>3.OA.A.1</td>
<td>● I can understand multiplication by thinking about groups of objects</td>
</tr>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>● I can find the missing number in a multiplication or division equation</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work</td>
</tr>
<tr>
<td>3.NBT.A2</td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
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<table>
<thead>
<tr>
<th><strong>Unit 1: Investigation 2: Skip Counting and 100 Charts</strong></th>
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<tbody>
<tr>
<td><strong>Primary Teaching Resources from Investigations: Sessions 2.1-2.6</strong></td>
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</tr>
<tr>
<td><strong>NJSLS addressed in Investigation 2</strong></td>
<td><strong>I Can Statements</strong></td>
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<tr>
<td>3.OA.A.1</td>
<td>● I can understand multiplication by thinking about groups of objects.</td>
</tr>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems.</td>
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<tr>
<td>3.OA.A.4</td>
<td>● I can find the missing number in a multiplication or division equation.</td>
</tr>
<tr>
<td>3.OA.B.5</td>
<td>● I can use the Commutative property of multiplication. (I know that if 6 x 4 = 24, then 4 x 6 = 24.)</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>● I can use the Associative property of multiplication. (To figure out 3 x 5 x 2, I can multiply 3 x 5 = 15, then 15 x 2 = 30 OR multiply 5 x 2 = 10, then 3 x 10 = 30.)</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can use the Distributive property of multiplication. (To figure out 8 x 7, I can think of 8 x (5 + 2) which means (8 x 5) + (8 x 2) = 40 + 16 = 56.)</td>
</tr>
<tr>
<td>3.NBT.A2</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td></td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
</tr>
<tr>
<td></td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
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</table>
### Unit 1: Investigation 3: Arrays

#### Primary Teaching Resources from Investigations: Sessions 3.1-3.7

**NJSLS addressed in Investigation 3**
- 3.OA.A.1
- 3.OA.A.4
- 3.OA.A.5
- 3.OA.C.7
- 3.OA.D.9
- 3.NBT.A.2
- 3.MD.C.7a
- 3.MD.C.7b
- 3.MD.C.7c

**I Can Statements**
- I can understand multiplication by thinking about groups of objects.
- I can find the missing number in a multiplication or division equation.
- I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.
- I can quickly and easily add and subtract numbers within 1000.
- I can find the area of a rectangle using square tiles and also by multiplying the two side lengths.
- I can solve real world problems about area using multiplication.
- I can use models to show that the area of a rectangle can be found by using the distributive property (side lengths $a$ and $b+c$ is the sum of $a \times b$ and $a \times c$).

### Unit 1: Investigation 4: Understanding Division

#### Primary Teaching Resources from Investigations: Sessions 4.1-4.7

**NJSLS addressed in Investigation 4**
- 3.OA.A.1
- 3.OA.A.2
- 3.OA.A.3
- 3.OA.A.4
- 3.OA.A.6
- 3.OA.B.6
- 3.NBT.A.2

**I Can Statements**
- I can understand multiplication by thinking about groups of objects.
- I can understand division by thinking about how one group can be divided into smaller groups.
- I can use what I know about multiplication and division to solve word problems.
- I can find the missing number in a multiplication or division equation.
- I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. (I can figure out $32 \div 8$ because I know that $8 \times 4 = 32$.)
- I can understand division as an unknown factor problem. This means I can solve a division problem by using multiplication.
- I can quickly and easily add and subtract numbers within 1000.
### Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources: [Multiplication](#)
- Everyday Counts Partner Games
- Ready Common Core Books

### 21st Century Skills

**CRP2.** Apply appropriate academic and technical skills  
**CRP4.** Communicate clearly and effectively and with reason.  
**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.

**9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

### Social Emotional Learning (SEL) Competencies

**Social and Emotional Learning Competencies**

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

### New Jersey Student Learning Standards - Technology

**8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.  
**8.2.5.C.4** Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.  
**8.2.5.D.3** Follow step by step directions to assemble a product or solve a problem.
## Unit 2: Graphs and Line Plots: Modeling with Data

### Cluster Standards

- **3.MD.B** Represent and interpret data

### Focus Mathematical Practices

- **MP4:** Model with mathematics
- **MP5:** Use appropriate tools strategically

### Main Math Ideas

- Describing, summarizing, and comparing data
- Representing data
- Generating measurement data

### Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes in Sessions: 1.9, 2.5
- Checklists in Sessions: 1.7, 1.8, 2.2, 2.5,

**Summative:**
- Pearson Unit 2 Assessment

**Additional Standards Based:**
- Study Island
# Unit 2: Investigation 1: Modeling with Data

## Primary Teaching Resources from Investigations: Sessions 1.1-1.9

<table>
<thead>
<tr>
<th>NJSLS addressed in Investigation 1</th>
<th>I Can Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.A.3</td>
<td>- I can use what I know about multiplication and division to solve word problems.</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>- I can find the missing number in a multiplication or division equation.</td>
</tr>
<tr>
<td>3.OA.D.8</td>
<td>- I can solve two-step word problems that involve addition, subtraction, multiplication and division.</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>- I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.</td>
</tr>
<tr>
<td>3.MD.B.3</td>
<td>- I can use mental math to figure out if the answers to two-step word problems are reasonable.</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td>- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
</tr>
<tr>
<td></td>
<td>- I can make a picture or bar graph to show data and solve problems using the information from the graphs.</td>
</tr>
<tr>
<td></td>
<td>- I can quickly and easily add and subtract numbers within 1000.</td>
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## Unit 2: Investigation 2: Collecting, Representing, and Analyzing Measurement Data

## Primary Teaching Resources from Investigations: Sessions 2.1-2.6

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<th>I Can Statements</th>
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<tr>
<td>3.NBT.A.2</td>
<td>- I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td>3.MD.B.3</td>
<td>- I can make a picture or bar graph to show data and solve problems using the information from the graphs.</td>
</tr>
<tr>
<td>3.MD.B.4</td>
<td>- I can create a line plot from measurement data, where the measured objects have been measured to the nearest whole number, half or quarter.</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>- I can find the missing number in a multiplication or division equation.</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
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</table>

## Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources [Multiplication, Graphs](#)
- Everyday Counts Partner Games
- Ready Common Core Books
## 21st Century Skills

**CRP2.** Apply appropriate academic and technical skills  
**CRP4.** Communicate clearly and effectively and with reason.  
**CRP6.** Demonstrate creativity and innovation.  
**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

### Social Emotional Learning (SEL) Competencies

**Social and Emotional Learning Competencies**

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

### New Jersey Student Learning Standards - Technology

8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.  
8.1.5.F.1 Apply digital tools to collect, organize, and analyze data that support a scientific finding.  
8.2.5.C.4 Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.  
8.2.5.D.3 Follow step by step directions to assemble a product or solve a problem.
## Unit 3: Travel Stories and Collections

### Cluster Standards

- **3.NBT. A** Use place value understanding and properties of operations to perform multi-digit arithmetic

### Focus Mathematical Practices

- **MP7**: Look for and make use of structure
- **MP2**: Reason abstractly and quantitatively

### Main Math Ideas

- Using knowledge of place value to add and subtract
- Adding and subtracting fluently
- Understanding different types of addition and subtraction problems

### Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes in Sessions: 2.4, 3.4, 5.5
- Checklists in Sessions: 1.2, 1.3, 1.4, 3.2, 3.3

**Summative:**
- Pearson Unit 3 Assessment

**Additional Standards Based:**
- Study Island
### Unit 3: Investigation 1: Working With 100

**Primary Teaching Resources from Investigations: Sessions 1.1-1.5**

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<tr>
<th>NJSS addressed in Investigation 1</th>
<th>I Can Statements</th>
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<tbody>
<tr>
<td>3.NBT.A.2</td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td>3.MD.B.3</td>
<td>● I can make a picture or bar graph to show data and solve problems using the information from the graphs.</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
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### Unit 3: Investigation 2: Building 1,000

**Primary Teaching Resources from Investigations: Sessions 2.1-2.4**

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<th>I Can Statements</th>
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<tr>
<td>3.NBT.A.2</td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
</tr>
<tr>
<td>3.NBT.A.1</td>
<td>● I can use place value to help me round numbers to the nearest 10 or 100.</td>
</tr>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems.</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td>3.OA.D.8</td>
<td>● I can solve two-step word problems that involve addition, subtraction, multiplication and division.</td>
</tr>
</tbody>
</table>

### Unit 3: Investigation 3: Addition

**Primary Teaching Resources from Investigations: Sessions 3.1-.1-3.5**

<table>
<thead>
<tr>
<th>NJSS addressed in Investigation 3</th>
<th>I Can Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.C.7</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td>3.NBT.A.1</td>
<td>● I can use place value to help me round numbers to the nearest 10 or 100.</td>
</tr>
</tbody>
</table>

### Unit 3: Investigation 4: Finding the Difference

**Primary Teaching Resources from Investigations: Sessions 4.1-.1-4.5**
### NJSLS addressed in Investigation 4
3.MD.A.1  
3.NBT.A.2  
3.OA.D.8

### I Can Statements
- I can measure time in minutes.
- I can quickly and easily add and subtract numbers within 1000.
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.

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### Unit 3: Investigation 5: Subtraction Stories

### Primary Teaching Resources from Investigations: Sessions 5.1-1-5.6

### Additional Resources
- **Achieve the Core**
- **Discovery Streaming**
- NJCTL worksheets and teacher resources: [Multiplication](#), [Graphs](#), [Place Value](#), [Division](#), [Time](#)
- **Everyday Counts Partner Games**
- **Ready Common Core Books**

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### 21st Century Skills

**CRP2.** Apply appropriate academic and technical skills.  
**CRP4.** Communicate clearly and effectively and with reason.  
**CRP6.** Demonstrate creativity and innovation.  
**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.  
**CRP11.** Use technology to enhance productivity.

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
### Social Emotional Learning (SEL) Competencies

**Social and Emotional Learning Competencies**

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

### New Jersey Student Learning Standards - Technology

**8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.

**8.1.5.F.1** Apply digital tools to collect, organize, and analyze data that support a scientific finding.

**8.2.5.C.4** Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.

**8.2.5.D.3** Follow step by step directions to assemble a product or solve a problem.
### Unit 4: Perimeter, Area, and Polygons

#### Cluster Standards
- **3.MD.C** Geometric measurement: understand concepts of area and relate area to multiplication and to addition
- **3.MD.D** Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measurements
- **3.G.A** Reason with shapes and their attributes

#### Focus Mathematical Practices
- **MP6:** Attend to precision
- **MP3:** Construct viable arguments and critique the reasoning of others

#### Main Math Ideas
- Understanding and finding perimeter
- Understanding and finding area
- Describing and classifying 2-D figures

#### Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes in Sessions 1.5, 2.6, 3.4
- Checklists in Sessions 1.3, 1.4, 1.5, 2.5, 2.6, 2.7,

**Summative:**
- Pearson Unit 4 Assessment

**Additional Standards Based:**
- Study Island

#### Unit 4: Investigation 1: Linear Measurement

Primary Teaching Resources from Investigations: Sessions 1.1-1.5
### NJSLS addressed in Investigation 1

<table>
<thead>
<tr>
<th>NJSLS</th>
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<tbody>
<tr>
<td>3.NBT.A.1</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td>3.MD.D.8</td>
</tr>
<tr>
<td>3.OA.D.8</td>
</tr>
<tr>
<td>3.GA.1</td>
</tr>
</tbody>
</table>

### I Can Statements

- I can use place value to help me round numbers to the nearest 10 or 100.
- I can quickly and easily add and subtract numbers within 1000.
- I can solve real world and mathematical problems involving perimeters of polygons.
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.
- I can place shapes into categories depending upon their attributes (parts).

### Unit 4: Investigation 2: Understanding and Finding Area

### Primary Teaching Resources from Investigations: Sessions 2.1-2.7

#### NJSLS addressed in Investigation 2

<table>
<thead>
<tr>
<th>NJSLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.GA.1</td>
</tr>
<tr>
<td>3.MD.C.5b</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td>3.MD.C.5a</td>
</tr>
<tr>
<td>3.MD.C.6</td>
</tr>
<tr>
<td>3.OA.A.3</td>
</tr>
<tr>
<td>3.OA.C.7</td>
</tr>
<tr>
<td>3.NBT.A.1</td>
</tr>
<tr>
<td>3.MD.C.7a</td>
</tr>
<tr>
<td>3.MD.D8</td>
</tr>
<tr>
<td>3.MD.C.7d</td>
</tr>
</tbody>
</table>

#### I Can Statements

- I can place shapes into categories depending upon their attributes (parts).
- I can cover a plane shape with square units to measure its area.
- I can quickly and easily add and subtract numbers within 1000.
- I can understand that a "unit square" is a square with side lengths of 1 unit and it is used to measure the area of plane shapes.
- I can measure areas by counting unit squares (square cm, square m, square in, square ft).
- I can use what I know about multiplication and division to solve word problems.
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can find the area of a rectangle using square tiles and also by multiplying the two side lengths.
- I can solve real world and mathematical problems involving perimeters of polygons.
- I can find the area of a shape by breaking it down into smaller shapes and then adding those areas to find the total area.

### Unit 4: Investigation 3: Triangles and Quadrilaterals

### Primary Teaching Resources from Investigations: Sessions 3.1-3.5

#### NJSLS addressed in Investigation 3

<table>
<thead>
<tr>
<th>NJSLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.GA.1</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td>3.NBT.A.1</td>
</tr>
<tr>
<td>3.MD.D8</td>
</tr>
<tr>
<td>3.MD.C.7d</td>
</tr>
</tbody>
</table>

#### I Can Statements

- I can place shapes into categories depending upon their attributes (parts).
- I can quickly and easily add and subtract numbers within 1000.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can solve real world and mathematical problems involving perimeters of polygons.
- I can find the area of a shape by breaking it down into smaller shapes and then adding those areas to find the total area.
Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources Multiplication, Place Value, Division, Shapes and Perimeter
- Everyday Counts Partner Games
- Ready Common Core Books

21st Century Skills

CRP2. Apply appropriate academic and technical skills.
CRP4. Communicate clearly and effectively and with reason.
CRP6. Demonstrate creativity and innovation.
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
CRP11. Use technology to enhance productivity.

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Social Emotional Learning (SEL) Competencies

Social and Emotional Learning Competencies

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

New Jersey Student Learning Standards - Technology

8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
8.2.5.C.4 Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.
8.2.5.D.3 Follow step by step directions to assemble a product or solve a problem.
# Unit 5: Cube Patterns, Arrays, and Multiples of 10

## Cluster Standards

- **3.OA.A** Represent and solve problems involving multiplication and division
- **3.OA.B** Understand properties of multiplication and the relationship between multiplication and division
- **3.OA.C** Multiply and Divide within 100
- **3.OA.D** Solve problems involving the four operations, and identify and explain patterns in arithmetic

## Focus Mathematical Practices

- **MP2**: Reason abstractly and quantitatively
- **MP7**: Look for and make sure of structure

## Main Math Ideas

- Understanding the meaning and structure of multiplication and division and the relationship between them
- Solving multiplication and division problems, including multi-step problems and problems with multiple solutions
- Making sense of multiplying multiples of 10 by one-digit numbers
- Learning multiplication facts

## Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes in Sessions 2.5, 3.4
- Checklists in Sessions 1.4, 1.5, 2.5, 2.6, 3.4, 3.5,

**Summative:**
- Pearson Unit 5 Assessment

**Additional Standards Based:**
- Study Island
## Unit 5: Investigation 1: Relationship Between Multiplication and Division

**Primary Teaching Resources from Investigations: Sessions 1.1-1.5**

### NJSLS addressed in Investigation 1
- 3.OA.C.7
- 3.OA.A.1
- 3.OA.D.9
- 3.NBT.A.2
- 3.OA.A.2
- 3.MD.C.7a
- 3.NBT.A.1
- 3.OA.A.3
- 3.OA.B.6

### I Can Statements
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can understand multiplication by thinking about groups of objects.
- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.
- I can quickly and easily add and subtract numbers within 1000.
- I can understand division by thinking about how one group can be divided into smaller groups.
- I can find the area of a rectangle using square tiles and also by multiplying the two side lengths.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can use what I know about multiplication and division to solve word problems.
- I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. (I can figure out $32 \div 8$ because I know that $8 \times 4 = 32$.)

## Unit 5: Investigation 2: Solving Multiplication and Division Problems

**Primary Teaching Resources from Investigations: Sessions 2.1-2.6**

### NJSLS addressed in Investigation 2
- 3.NBT.A.1
- 3.NBT.A.2
- 3.OA.B.5
- 3.OA.C.7
- 3.MD.C.7b
- 3.MD.C.7c
- 3.OA.A.3
- 3.OA.A.4
- 3.OA.B.6

### I Can Statements
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can quickly and easily add and subtract numbers within 1000.
- I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can solve real world problems about area using multiplication.
- I can use models to show that the area of a rectangle can be found by using the distributive property (side lengths $a$ and $b+c$ is the sum of $a \times b$ and $a \times c$).
- I can use what I know about multiplication and division to solve word problems.
- I can find the missing number in a multiplication or division equation.
- I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. (I can figure out $32 \div 8$ because I know that $8 \times 4 = 32$.)
# Unit 5: Investigation 3: Multiplying by Multiples of 10

**Primary Teaching Resources from Investigations: Sessions 3.1-1-3.6**

## NJSLS addressed in Investigation 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.C.7</td>
<td>3.OA.A.3</td>
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<tr>
<td>3.OA.D.9</td>
<td>3.NBT.A.3</td>
</tr>
<tr>
<td>3.MD.C.7b</td>
<td>3.OA.B.5</td>
</tr>
<tr>
<td>3.OA.B.5</td>
<td>3.OA.D.8</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>3.NBT.A.1</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td>3.OA.A.2</td>
</tr>
</tbody>
</table>

## I Can Statements

- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can use what I know about multiplication and division to solve word problems.
- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.
- I can multiply any one digit whole number by a multiple of 10 (6 x 90, 4 x 30).
- I can solve real world problems about area using multiplication.
- I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.
- I can find the missing number in a multiplication or division equation.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can quickly and easily add and subtract numbers within 1000.
- I can understand division by thinking about how one group can be divided into smaller groups.

## Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTCL worksheets and teacher resources [Multiplication](#), [Place Value](#), [Division](#)
- Everyday Counts Partner Games
- Ready Common Core Books

## 21st Century Skills

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6.** Demonstrate creativity and innovation.
- **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11.** Use technology to enhance productivity.

**9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
### Social Emotional Learning (SEL) Competencies

**Social and Emotional Learning Competencies**

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

### New Jersey Student Learning Standards - Technology

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1.5.A.1</td>
<td>Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</td>
</tr>
<tr>
<td>8.1.5.F.1</td>
<td>Apply digital tools to collect, organize, and analyze data that support a scientific finding.</td>
</tr>
<tr>
<td>8.2.5.C.4</td>
<td>Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.</td>
</tr>
<tr>
<td>8.2.5.D.3</td>
<td>Follow step by step directions to assemble a product or solve a problem.</td>
</tr>
</tbody>
</table>
Unit 6: Fair Shares and Fractions on Number Lines: Fractions

Cluster Standards

- 3.NF.A Develop understanding of fractions as numbers
- 3.G.A Reason with shapes and their attributes

Focus Mathematical Practices

- MP4: Model with mathematics
- MP5: Use appropriate tools strategically

Main Math Ideas

- Understanding the meaning of fractions as equal parts of a whole
- Understanding the meaning of fractions as numbers
- Comparing fractions and reasoning about fraction equivalencies with representations
- Modeling with fraction notation

Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

Formative:
Teacher Observation
Anecdotal Notes
Unit Quizzes- 1.8, 2.4
Checklist - 1.4, 1.6, 1.7, 2.3, 2.4

Summative:
Pearson Unit 6 Assessment

Additional Standards Based:
Study Island
# Unit 6: Investigation 1: Sharing Brownies

Primary Teaching Resources from Investigations: Sessions 1.1-1.8

## NJSLS addressed in Investigation 1

<table>
<thead>
<tr>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.A.3</td>
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<td>3.OA.C.7</td>
</tr>
<tr>
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<tr>
<td>3.NBT.A.2</td>
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<tr>
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<td>3.NF.A.2a</td>
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<td>3.NF.A.2b</td>
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<tr>
<td>3.NF.A.3a</td>
</tr>
<tr>
<td>3.NF.A.3b</td>
</tr>
<tr>
<td>3.NF.A.3c</td>
</tr>
<tr>
<td>3.NF.A.3d</td>
</tr>
<tr>
<td>3.MD.A.1</td>
</tr>
<tr>
<td>3.MD.B.4</td>
</tr>
<tr>
<td>3.G.A.2</td>
</tr>
</tbody>
</table>

## I Can Statements

- I can use what I know about multiplication and division to solve word problems.
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can solve two-step word problems that involve addition, subtraction, multiplication, and division.
- I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.
- I can use mental math to figure out if the answers to two-step word problems are reasonable.
- I can quickly and easily add and subtract numbers within 1000.
- I can multiply any one digit whole number by a multiple of 10 (6 x 90, 4 x 30).
- I can show and understand that fractions represent equal parts of a whole, where the top number is the part and the bottom number is the total number of parts in the whole.
- I can understand a fraction as a number on the number line by showing fractions on a number line diagram.
- I can label fractions on a number line because I know the space between any two numbers on the number line can be thought of as a whole.
- I can show a fraction on a number line by marking off equal parts between two whole numbers.
- I can compare fractions by reasoning about their size.
- I can understand two fractions as equivalent (equal) if they are the same size or at the same point on a number line.
- I can recognize and write simple equivalent (equal) fractions and explain why they are equal using words or models.
- I can show whole numbers as fractions. (3 = 3/1)
- I can recognize fractions that are equal to one whole. (1 = 4/4)
- I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size.
- I can understand that comparing two fractions is only reasonable if they refer to the same whole.
- I can compare fractions with the symbols >, =, < and prove my comparison by using models.
- I can tell and write time to the nearest minute.
- I can measure time in minutes.
- I can solve telling time word problems by adding and subtracting minutes.
- I can create a line plot from measurement data, where the measured objects have been measured to the nearest whole number, half or quarter.
- I can divide shapes into parts with equal areas and show those areas as fractions.
# Unit 6: Investigation 2: Many Ways To Make A Share

## Primary Teaching Resources from Investigations: Sessions 2.1-2.5

<table>
<thead>
<tr>
<th>NJSLS addressed in Investigation 2</th>
<th>I Can Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems.</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>● I can find the missing number in a multiplication or division equation.</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td>3.OA.D.8</td>
<td>● I can solve two-step word problems that involve addition, subtraction, multiplication and division.</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td>● I can use mental math to figure out if the answers to two-step word problems are reasonable.</td>
</tr>
<tr>
<td>3.NBT.A.3</td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
</tr>
<tr>
<td>3.NF.A.1</td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td>3.NF.A.2a</td>
<td>● I can multiply any one digit whole number by a multiple of 10 (6 x 90, 4 x 30).</td>
</tr>
<tr>
<td>3.NF.A.2b</td>
<td>● I can show and understand that fractions represent equal parts of a whole, where the top number is the part and the bottom number is the total number of parts in the whole.</td>
</tr>
<tr>
<td>3.NF.A.3a</td>
<td>● I can understand a fraction as a number on the number line by showing fractions on a number line diagram.</td>
</tr>
<tr>
<td>3.NF.A.3b</td>
<td>● I can label fractions on a number line because I know the space between any two numbers on the number line can be thought of as a whole.</td>
</tr>
<tr>
<td>3.NF.A.3c</td>
<td>● I can show a fraction on a number line by marking off equal parts between two whole numbers.</td>
</tr>
<tr>
<td>3.NF.A.3d</td>
<td>● I can understand two fractions as equivalent (equal) if they are the same size or at the same point on a number line.</td>
</tr>
<tr>
<td>3.MD.A.1</td>
<td>● I can recognize and write simple equivalent (equal) fractions and explain why they are equal using words or models.</td>
</tr>
<tr>
<td>3.G.A.2</td>
<td>● I can show whole numbers as fractions. (3 = 3/1)</td>
</tr>
<tr>
<td></td>
<td>● I can recognize fractions that are equal to one whole. (1 = 4/4)</td>
</tr>
<tr>
<td></td>
<td>● I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size.</td>
</tr>
<tr>
<td></td>
<td>● I can understand that comparing two fractions is only reasonable if they refer to the same whole.</td>
</tr>
<tr>
<td></td>
<td>● I can compare fractions with the symbols &gt;, =, &lt; and prove my comparison by using models.</td>
</tr>
<tr>
<td></td>
<td>● I can tell and write time to the nearest minute.</td>
</tr>
<tr>
<td></td>
<td>● I can measure time in minutes.</td>
</tr>
<tr>
<td></td>
<td>● I can solve telling time word problems by adding and subtracting minutes.</td>
</tr>
</tbody>
</table>
I can divide shapes into parts with equal areas and show those areas as fractions.

Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources Fractions, Time
- Everyday Counts Partner Games
- Ready Common Core Books

21st Century Skills

CRP2. Apply appropriate academic and technical skills.
CRP4. Communicate clearly and effectively and with reason.
CRP6. Demonstrate creativity and innovation.
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
CRP11. Use technology to enhance productivity.

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Social Emotional Learning (SEL) Competencies

Social and Emotional Learning Competencies

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New Jersey Student Learning Standards - Technology

8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
8.1.5.F.1 Apply digital tools to collect, organize, and analyze data that support a scientific finding.
8.2.5.C.4 Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.
8.2.5.D.3 Follow step by step directions to assemble a product or solve a problem.
## Unit 7: Addition, Subtraction, and the Number System 2

### Cluster Standards

- **3.OA.D** Solve problems involving the four operations, and identify and explain patterns in arithmetic
- **3.MD.A** Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- **3.NBT.A** Use place value understanding and properties of operations to perform multi-digit arithmetic

### Focus Mathematical Practices

- **MP1**: Make sense of problems and persevere in solving them.
- **MP3**: Construct viable arguments and critique the reasoning of others

### Main Math Ideas

- Solving problems involving measurement of liquid volume and mass
- Adding and subtracting fluently
- Describing, analyzing and comparing strategies for adding and subtracting whole numbers

### Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. Differentiation is embedded to support the range of learners throughout each session, as well as expanded differentiated activities are provided at the end of each investigation. You can gather data using a variety of strategies and resources.

**Formative:**
- Teacher Observation
- Anecdotal Notes
- Unit Quizzes-1.7, 2.4, 3.5
- Checklist - 1.1, 1.2, 1.5, 1.6, 1.7, 2.1

**Summative:**
- Pearson Unit 7 Assessment

**Additional Standards Based:**
- Study Island
# Unit 7 Investigation 1: Number in the Hundreds

## Primary Teaching Resources from Investigations: Sessions 1.1- 1.7

### NJSLS addressed in Investigation 1
3.OA.A.4
3.OA.D.8
3.OA.D.9
3.NBT.A.2
3.NF.A.1
3.NF.A.2a
3.NF.A.2b
3.NF.A.3d
3.MD.A.2

### I Can Statements
- I can find the missing number in a multiplication or division equation.
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.
- I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.
- I can use mental math to figure out if the answers to two-step word problems are reasonable.
- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.
- I can quickly and easily add and subtract numbers within 1000.
- I can show and understand that fractions represent equal parts of a whole, where the top number is the part and the bottom number is the total number of parts in the whole.
- I can label fractions on a number line because I know the space between any two numbers on the number line can be thought of as a whole.
- I can show a fraction on a number line by marking off equal parts between two whole numbers.
- I can compare two fractions with the same numerator (top number)or the same denominator (bottom number) by reasoning about their size.
- I can understand that comparing two fractions is only reasonable if they refer to the same whole.
- I can measure liquids and solids with grams (g), kilograms (kg) and liters (l).
- I can use addition, subtraction, multiplication and division to solve word problems about mass or volume.

# Unit 7 Investigation 2: Addition Strategies

## Primary Teaching Resources from Investigations: Sessions 2.1-2.5

### NJSLS addressed in Investigation 2
3.OA.D.8
3.NBT.A.1
3.NBT.A.2
3.NF.A.2a
3.NF.A.3a
3.NF.A.3d
3.MD.A.2

### I Can Statements
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.
- I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.
- I can use mental math to figure out if the answers to two-step word problems are reasonable.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can quickly and easily add and subtract numbers within 1000.
- I can label fractions on a number line because I know the space between any two numbers on the number line can be thought of as a whole.
- I can understand two fractions as equivalent (equal) if they are the same size or at the same point on a number line.
- I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size.
- I can understand that comparing two fractions is only reasonable if they refer to the same whole.
- I can measure liquids and solids with grams (g), kilograms (kg) and liters (l).
- I can use addition, subtraction, multiplication and division to solve word problems about mass or volume.

**Unit 7 Investigation 3: Subtraction**

**Primary Teaching Resources from Investigations: Sessions 3.1-3.6**

| 3.OA.A.4 | I can find the missing number in a multiplication or division equation. |
| 3.OA.B.6 | I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. (I can figure out \(32 \div 8\) because I know that \(8 \times 4 = 32\).) |
| 3.OA.D.8 | I can solve two-step word problems that involve addition, subtraction, multiplication and division. |
| 3.OA.D.9 | I can solve two-step word problems by writing an equation with a letter in place of the number I don't know. |
| 3.NBT.A.1 | I can use mental math to figure out if the answers to two-step word problems are reasonable. |
| 3.NBT.A.2 | I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work. |
| 3.NF.A.1 | I can use place value to help me round numbers to the nearest 10 or 100. |
| 3.NF.A.3d | I can quickly and easily add and subtract numbers within 1000. |
| 3.NF.A.3d | I can show and understand that fractions represent equal parts of a whole, where the top number is the part and the bottom number is the total number of parts in the whole. |
| 3.NF.A.3d | I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size. |
| 3.NF.A.3d | I can understand that comparing two fractions is only reasonable if they refer to the same whole. |
| 3.NF.A.3d | I can compare fractions with the symbols >, =, < and prove my comparison by using models. |
### Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources Mass, Time and Volume
- Everyday Counts Partner Games
- Ready Common Core Books

### 21st Century Skills

**CRP2.** Apply appropriate academic and technical skills.  
**CRP4.** Communicate clearly and effectively and with reason.  
**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.  
**CRP11.** Use technology to enhance productivity.

**9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

### Social Emotional Learning (SEL) Competencies

**Social and Emotional Learning Competencies**

- Acquire and apply the knowledge, attitudes and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

### New Jersey Student Learning Standards - Technology

**8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.  
**8.2.5.C.4** Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.  
**8.2.5.D.3** Follow step by step directions to assemble a product or solve a problem.
# Unit 8: Larger Numbers and Multi-Step Problems

## Cluster Standards

- **3.OA.A** Represent and solve problems involving multiplication and division
- **3.OA.B** Understand properties of multiplication and the relationship between multiplication and division
- **3.OA.C** Multiply and divide within 100
- **3.OA.D** Solve problems involving the four operations, and identify and explain patterns in arithmetic.

## Focus Mathematical Practices

- **MP6**: Attend to precision
- **MP8**: Look for and express regularity in repeated reasoning.

## Main Math Ideas

- Solving multiplication problems with 2-digit numbers
- Solving division problems
- Learning division facts

## Assessment Ideas/Options/Suggestions

Data driven instruction will enhance our ability to monitor the progress of our students. Formative and Summative assessment supports determining where students are at within the continuum of learning. You can gather data using a variety of strategies and resources.

**Formative:**
Teacher Observation
Anecdotal Notes
Unit Quizzes- 2.4, 3.4
Checklist- 1.5, 1.6, 2.3, 2.4, 2.5, 3.2, 3.3

**Summative:**
Pearson Unit 8 Assessment

**Additional Standards Based:**
Study Island
## Unit 8 Investigation 1: Solving Division Problems

**Primary Teaching Resources from Investigations: Sessions 1.1-1.6**

<table>
<thead>
<tr>
<th>NJSLS addressed in Investigation 1</th>
<th>I Can Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.A.2</td>
<td>● I can understand division by thinking about how one group can be divided into smaller groups.</td>
</tr>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems.</td>
</tr>
<tr>
<td>3.OA.A.4</td>
<td>● I can find the missing number in a multiplication or division equation.</td>
</tr>
<tr>
<td>3.OA.B.5</td>
<td>● I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)</td>
</tr>
<tr>
<td>3.OA.B.6</td>
<td>● I can use the Associative property of multiplication. (To figure out $3 \times 5 \times 2$, I can multiply $3 \times 5 = 15$, then $15 \times 2 = 30$ OR multiply $5 \times 2 = 10$, then $3 \times 10 = 30$.)</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>● I can use the Distributive property of multiplication. (To figure out $8 \times 7$, I can think of $8 \times (5 + 2)$ which means $(8 \times 5) + (8 \times 2) = 40 + 16 = 56$.)</td>
</tr>
<tr>
<td>3.OA.D.9</td>
<td>● I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. (I can figure out $32 \div 8$ because I know that $8 \times 4 = 32$.)</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td>3.MD.A.1</td>
<td>● I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.</td>
</tr>
<tr>
<td></td>
<td>● I can quickly and easily add and subtract numbers within 1000.</td>
</tr>
<tr>
<td></td>
<td>● I can tell and write time to the nearest minute.</td>
</tr>
<tr>
<td></td>
<td>● I can measure time in minutes.</td>
</tr>
<tr>
<td></td>
<td>● I can solve telling time word problems by adding and subtracting minutes.</td>
</tr>
</tbody>
</table>

## Unit 8 Investigation 2: Solving Multiplication and Division Problems

**Primary Teaching Resources from Investigations: Sessions 2.1-2.5**

<table>
<thead>
<tr>
<th>NJSLS addressed in Investigation 2</th>
<th>I Can Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.OA.A.3</td>
<td>● I can use what I know about multiplication and division to solve word problems.</td>
</tr>
<tr>
<td>3.OA.B.5</td>
<td>● I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)</td>
</tr>
<tr>
<td>3.OA.B.6</td>
<td>● I can use the Associative property of multiplication. (To figure out $3 \times 5 \times 2$, I can multiply $3 \times 5 = 15$, then $15 \times 2 = 30$ OR multiply $5 \times 2 = 10$, then $3 \times 10 = 30$.)</td>
</tr>
<tr>
<td>3.OA.C.7</td>
<td>● I can use the Distributive property of multiplication. (To figure out $8 \times 7$, I can think of $8 \times (5 + 2)$ which means $(8 \times 5) + (8 \times 2) = 40 + 16 = 56$.)</td>
</tr>
<tr>
<td>3.OA.C.7c</td>
<td>● I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.</td>
</tr>
<tr>
<td>3.OA.D.8</td>
<td>● I can solve two-step word problems that involve addition, subtraction, multiplication and division.</td>
</tr>
<tr>
<td>3.NBT.A.1</td>
<td>● I can use place value to help me round numbers to the nearest 10 or 100.</td>
</tr>
<tr>
<td>3.NBT.A.2</td>
<td></td>
</tr>
</tbody>
</table>
I can quickly and easily add and subtract numbers within 1000.

**Unit 8 Investigation 3: Solving Multi-Step Problems**

Primary Teaching Resources from Investigations: Sessions 3.1-3.5

- 3.OA.A.3
- 3.OA.B.5
- 3.OA.C.7
- 3.OA.D.8
- 3.NBT.A.1
- 3.NBT.A.2
- 3.NF.A.3a
- 3.NF.A.3d
- 3.MD.A.1
- 3.MD.A.2
- 3.MD.B.3
- I can use what I know about multiplication and division to solve word problems.
- I can use the Commutative property of multiplication. (I know that if $6 \times 4 = 24$, then $4 \times 6 = 24$.)
- I can use the Associative property of multiplication. (To figure out $3 \times 5 \times 2$, I can multiply $3 \times 5 = 15$, then $15 \times 2 = 30$ OR multiply $5 \times 2 = 10$, then $3 \times 10 = 30$.)
- I can use the Distributive property of multiplication. (To figure out $8 \times 7$, I can think of $8 \times (5 + 2)$ which means $(8 \times 5) + (8 \times 2) = 40 + 16 = 56$.)
- I can multiply and divide within 100 easily and quickly because I know how multiplication and division are related.
- I can solve two-step word problems that involve addition, subtraction, multiplication and division.
- I can solve two-step word problems by writing an equation with a letter in place of the number I don't know.
- I can use mental math to figure out if the answers to two-step word problems are reasonable.
- I can find patterns in addition and multiplication tables and explain them using what I know about how numbers work.
- I can use place value to help me round numbers to the nearest 10 or 100.
- I can quickly and easily add and subtract numbers within 1000.
- I can understand how some different fractions can actually be equal.
- I can compare fractions by reasoning about their size.
- I can understand two fractions as equivalent (equal) if they are the same size or at the same point on a number line.
- I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size.
- I can understand that comparing two fractions is only reasonable if they refer to the same whole.
- I can compare fractions with the symbols $>$, $=$, $<$ and prove my comparison by using models.
- I can tell and write time to the nearest minute.
- I can measure time in minutes.
- I can solve telling time word problems by adding and subtracting minutes.
- I can use addition, subtraction, multiplication and division to solve word problems about mass or volume.
- I can make a picture or bar graph to show data and solve problems using the information from the graphs.
### Additional Resources

- Achieve the Core
- Discovery Streaming
- NJCTL worksheets and teacher resources Division, Multiplication
- Everyday Counts Partner Games
- Ready Common Core Books

### 21st Century Skills

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**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
**CRP11.** Use technology to enhance productivity.

9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.
9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

### Social Emotional Learning (SEL) Competencies

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