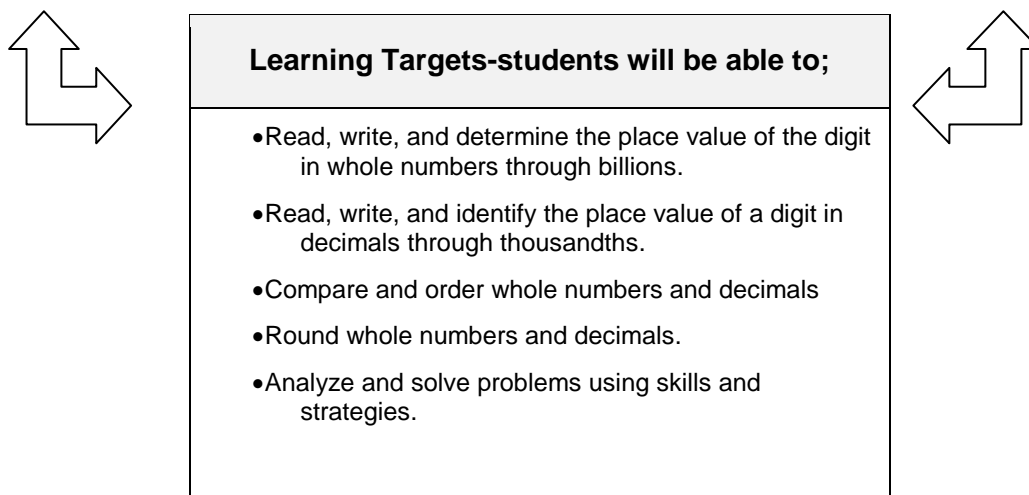
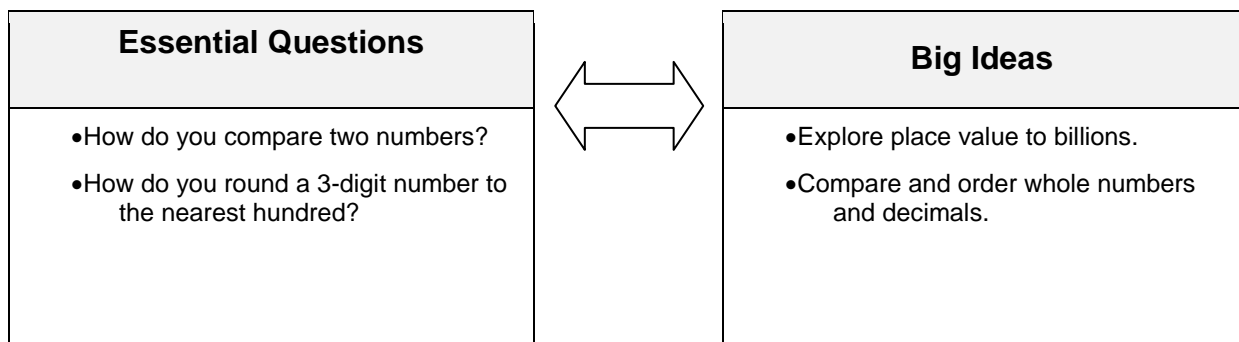


<b>Unit Title</b>	<b>Unit 1: Understanding Place Value</b>
Time frame	3 weeks
21 <sup>st</sup> Century Themes	Critical Thinking and Problem Solving Communication and Collaboration ICT (Information, Communications and Technology) Literacy Flexibility and Adaptability Initiative and Self-Direction Social and Cross-Cultural Skills Productivity and Accountability
Interdisciplinary focus and technology integration	Technology: Learn how to link spreadsheets and graphs to display data. Science: Find out how much rain falls in a rain forest. Social Studies: Compare the populations of five countries.

**Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed**



## Assessment

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

## Differentiation

- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

### Content Standards

NBT 4.1, 4.2, 4.3, 5.3 A, B 5.4

MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8

### Approaches to Learning

In this unit students will acquire the knowledge to:

- Use place value to billions and thousandths.
- Compare and order whole numbers and decimals.

### Learning Experiences

- Course of study
- Notes and examples
- Practice by homework
- Cumulative review exercises
- Test prep questions
- Hands-on activities and use of manipulatives
- Problem solving activities

### Teaching Strategies

- Direct instruction
- Differentiated instruction
- Interdisciplinary activities
- Cooperative learning activities
- Reinforcement and remediation

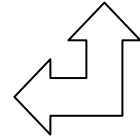
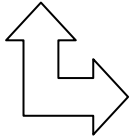
## Resources

- Mathematics: The Path to Math Success (Grade 5). 2001: Silver Burdett Ginn, Inc.
- Internet: [www.studyisland.com](http://www.studyisland.com)

<b>Unit Title</b>	<b>Unit 2: Number Operation and Number Theory</b>
Time frame	15 weeks
21 <sup>st</sup> Century Themes	<p>Critical Thinking and Problem Solving</p> <p>Communication and Collaboration</p> <p>ICT (Information, Communications and Technology) Literacy</p> <p>Flexibility and Adaptability</p> <p>Initiative and Self-Direction</p> <p>Social and Cross-Cultural Skills</p> <p>Productivity and Accountability</p>
Interdisciplinary focus and technology integration	<p>Science: Use a chart of different animal weights to estimate.</p> <p>Social Studies: Learn about the six largest national parks in the United States.</p> <p>Technology: Use a map online and a calculator to figure out how long a trip takes.</p>

## Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed

Essential Questions	↔	Big Ideas
<ul style="list-style-type: none"> <li>•How do you estimate a sum?</li> <li>•How is subtracting decimal numbers the same as subtracting whole numbers? How is it different?</li> <li>•What is multiplication?</li> <li>•How can you estimate a product?</li> <li>•How can you equally share five dollars among four people?</li> <li>•If you know that one pen costs \$1.10, how would you find out the cost of three pens?</li> <li>•What is division?</li> <li>•How are multiplication and division different?</li> <li>•How are division and subtraction related?</li> <li>•How can you estimate a quotient?</li> </ul>		<ul style="list-style-type: none"> <li>•Use addition properties and number strategies to add and subtract whole numbers and decimals.</li> <li>•Learn how multiplication and division are related.</li> <li>•Develop and apply the multiplication algorithm and multiply by one- and two-digit numbers.</li> <li>•Use number patterns and multiplication properties to estimate products and quotients.</li> <li>•Multiply and divide whole numbers and decimals.</li> <li>•Divide lesser and greater dividends by one-digit divisors.</li> <li>•Use basic facts, number patterns, and strategies to divide by two-digit divisors.</li> </ul>



### **Learning Targets-students will be able to;**

- Estimate sums and differences for whole numbers and decimals.
- Relating addition and subtraction.
- Add and subtract whole numbers and decimals.
- Relating multiplication and division.
- Multiplying by multiples of 10, 100, and 1000.
- Estimate products using whole numbers and decimals.
- Multiply by one-, two-, three-digit factors, including money.
- Multiply decimals.
- Multiply decimals by 10, 100, and 1,000.
- Divide a decimal by a whole number.
- Use compatible numbers to estimate quotients.
- Divide two-, three-, and four-digit numbers by one-and two-digit divisors (including multiples of 10, 100, 1,000).
- Divide by multiples of ten.
- Find averages.
- Analyze and solve problems using skills and strategies.

### **Assessment**

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

### **Differentiation**

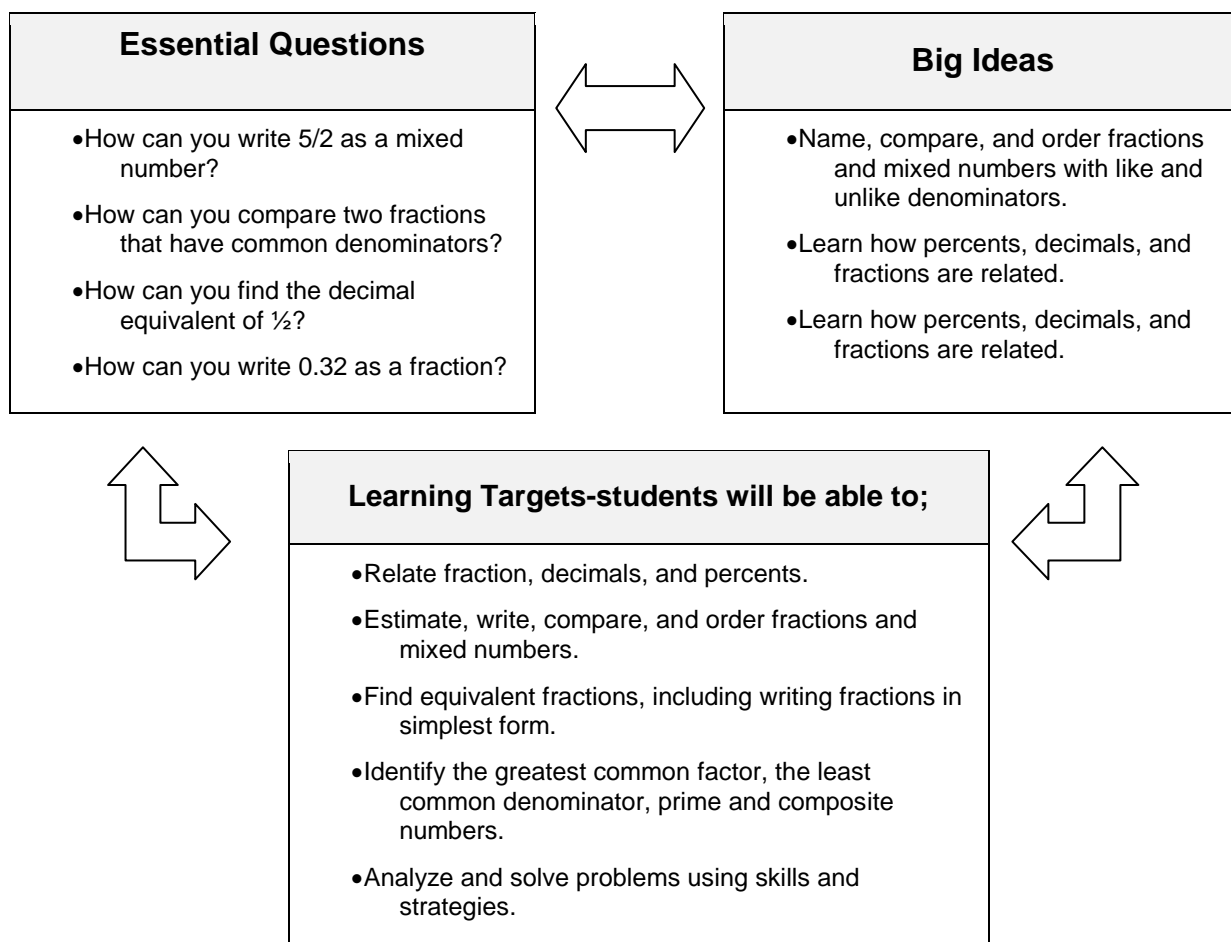
- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

Content Standards	
NBT 5.5, 5.6, 5.7 OA 4.2, 4.3 MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8	
Approaches to Learning	
In this unit students will acquire the knowledge to: <ul style="list-style-type: none"> <li>•Add and subtract whole numbers to ten thousandths and decimals to thousandths.</li> <li>•Multiply by one, two and three digit numbers.</li> <li>•Introduce multiplication of decimals by whole numbers and decimals and division of decimals by whole numbers.</li> <li>•Divide four-digit dividends by one-digit divisors.</li> <li>•Relate multiplication and division.</li> <li>•Find averages (mean).</li> <li>•Divide four-digit dividends by two digit divisors with and without remainders.</li> </ul>	
Learning Experiences	Teaching Strategies
<ul style="list-style-type: none"> <li>•Course of study</li> <li>•Notes and examples</li> <li>•Practice by homework</li> <li>•Cumulative review exercises</li> <li>•Test prep questions</li> <li>•Hands-on activities and use of manipulatives</li> <li>•Problem solving activities</li> </ul>	<ul style="list-style-type: none"> <li>•Direct instruction</li> <li>•Differentiated instruction</li> <li>•Interdisciplinary activities</li> <li>•Cooperative learning activities</li> <li>•Reinforcement and remediation</li> </ul>
Resources	
<ul style="list-style-type: none"> <li>•Mathematics: The Path to Math Success (Grade 5). 2001: Silver Burdett Ginn, Inc.</li> <li>•Internet: <a href="http://www.studyisland.com">www.studyisland.com</a></li> </ul>	

<b>Unit Title</b>	<b>Unit 3: Fractions and Percents</b>
Time frame	6 weeks
21 <sup>st</sup> Century Themes	Critical Thinking and Problem Solving Communication and Collaboration ICT (Information, Communications and Technology) Literacy Flexibility and Adaptability Initiative and Self-Direction Social and Cross-Cultural Skills Productivity and Accountability
Interdisciplinary focus and technology integration	Technology: Learn how to link number cubes, a spreadsheet, and a bar graph to explore probability. Language Arts: Find out what origami is. Social Studies: Use knowledge of U.S. geography to solve a problem.

**Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed**



## Assessment

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

## Differentiation

- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

### Content Standards

NF 5.1, 5.2, 5.3, 5.4 A, 5.6, 5.7 A, B, C  
MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8

### Approaches to Learning

In this unit students will acquire the knowledge to:

- Name, compare, and order fractions and mixed numbers.
- Identify the greatest common factor.
- Identify the least common denominator.
- Relate percents, decimals, and fractions.

### Learning Experiences

- Course of study
- Notes and examples
- Practice by homework
- Cumulative review exercises
- Test prep questions

### Teaching Strategies

- Direct instruction
- Differentiated instruction
- Interdisciplinary activities
- Cooperative learning activities
- Reinforcement and remediation

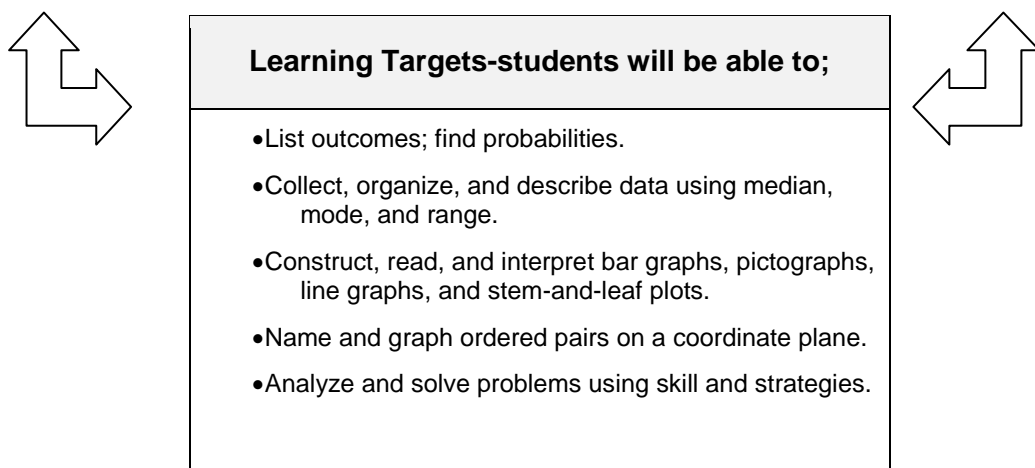
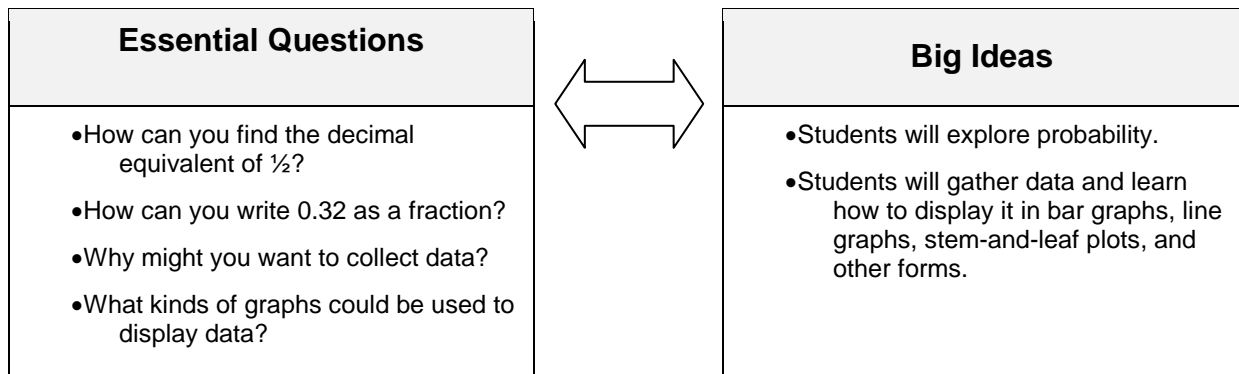
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| <ul style="list-style-type: none"><li>•Hands-on activities and use of manipulatives</li><li>•Problem solving activities</li></ul> |  |
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<b>Resources</b>	
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- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>•Mathematics: The Path to Math Success (Grade 5). 2001: Silver Burdett Ginn, Inc.</li><li>•Internet: <a href="http://www.studyisland.com">www.studyisland.com</a></li></ul> |  |
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<b>Unit Title</b>	<b>Unit 4: Probability, Statistics, Data, and Graphs</b>
Time frame	4 weeks
21 <sup>st</sup> Century Themes	Critical Thinking and Problem Solving Communication and Collaboration ICT (Information, Communications and Technology) Literacy Flexibility and Adaptability Initiative and Self-Direction Social and Cross-Cultural Skills Productivity and Accountability
Interdisciplinary focus and technology integration	Technology: Use the Internet to investigate solar-powered cars. Social Studies: Find out who built the first successful gasoline-powered car.

**Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed**



## Assessment

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

## Differentiation

- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

### Content Standards

OA 3.8  
MD 3.3  
MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8

### Approaches to Learning

In this unit students will acquire the knowledge to:

- Use ratios to find rate, unit rate, and probability.
- Collect and organize data in line plots, double bar graphs, and frequency tables.
- Identify misleading graphs.
- Find the median, mode, and range.

### Learning Experiences

- Course of study
- Notes and examples
- Practice by homework
- Cumulative review exercises

### Teaching Strategies

- Direct instruction
- Differentiated instruction
- Interdisciplinary activities
- Cooperative learning activities

- Test prep questions
- Hands-on activities and use of manipulatives
- Problem solving activities

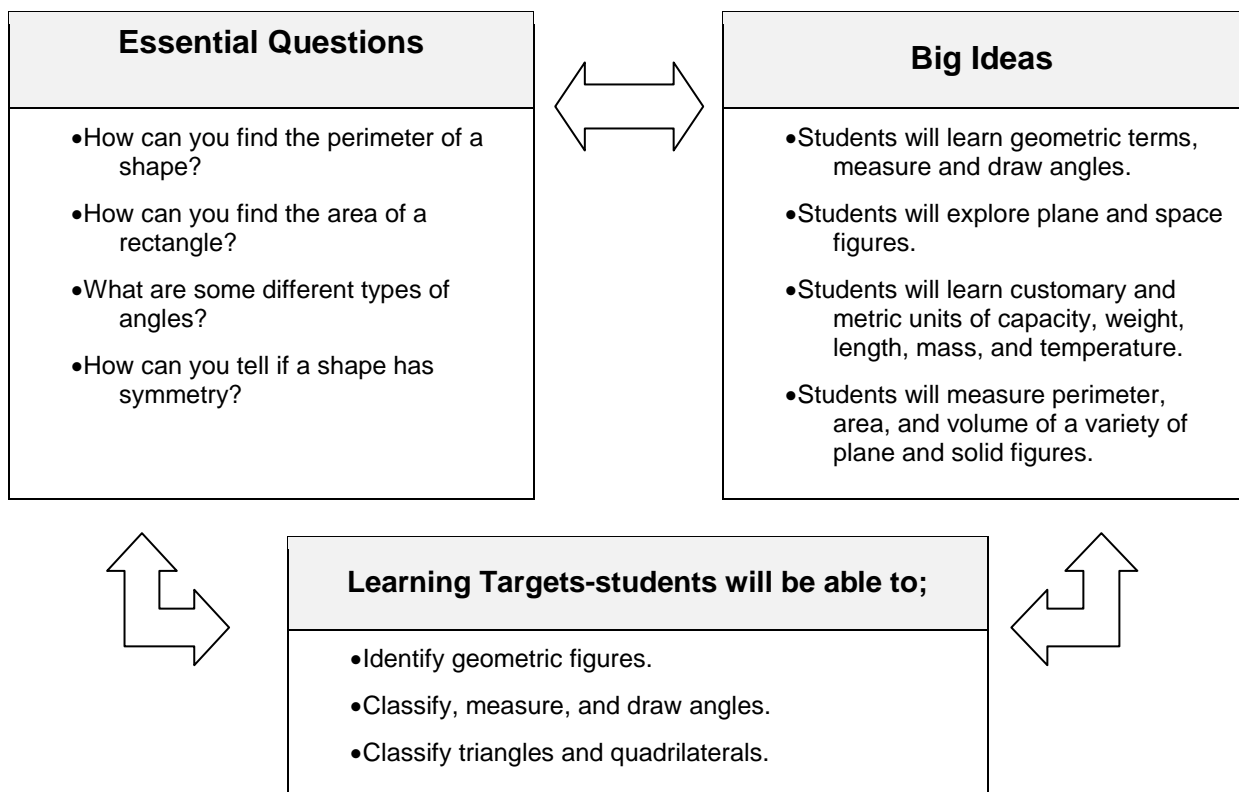
- Reinforcement and remediation

## **Resources**

- Mathematics: The Path to Math Success (Grade 5). 2001: Silver Burdett Ginn, Inc.
- Internet: [www.studyisland.com](http://www.studyisland.com)

<b>Unit Title</b>	<b>Unit 5: Geometry and Measurement</b>
Time frame	6 weeks
21 <sup>st</sup> Century Themes	Critical Thinking and Problem Solving Communication and Collaboration ICT (Information, Communications and Technology) Literacy Flexibility and Adaptability Initiative and Self-Direction Social and Cross-Cultural Skills Productivity and Accountability Health Literacy
Interdisciplinary focus and technology integration	Technology: Visit a website that can help convert one unit of measure to another unit. Language Arts: Write about how perimeter, area, or volume can be useful in everyday life. Social Studies: See two objects that use sand to tell time. Health and Fitness: Discover how much of the human body is water.

**Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed**



- Identify figures that are congruent, similar, symmetrical, and involve transformations.
- Estimate, add, and subtract units of time.
- Estimate, measure, and convert U.S. customary units of length, capacity, weight, and temperature.
- Estimate, measure, and convert metric units of length, capacity, mass, and temperature.
- Find perimeter, circumference, area, and volume.
- Analyze and solve problems using skill and strategies.

### Assessment

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

### Differentiation

- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

### Content Standards

MD 5.3 A B, 5.4, 5.5 A B C  
 G 5.1, 5.2, 5.3, 5.4  
 MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8

## Approaches to Learning

In this unit students will acquire the knowledge to:

- Use nonstandard, customary, and metric units of length, weight, capacity, and mass.
- Develop perimeter, area, and volume formulas for other figures.
- Classify geometric shapes by their properties.
- Measure and draw angles.

### Learning Experiences

- Course of study
- Notes and examples
- Practice by homework
- Cumulative review exercises
- Test prep questions
- Hands-on activities and use of manipulatives
- Problem solving activities

### Teaching Strategies

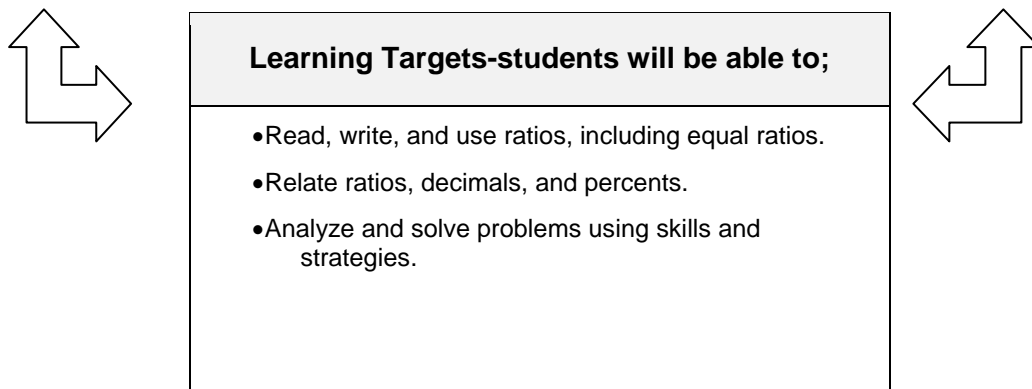
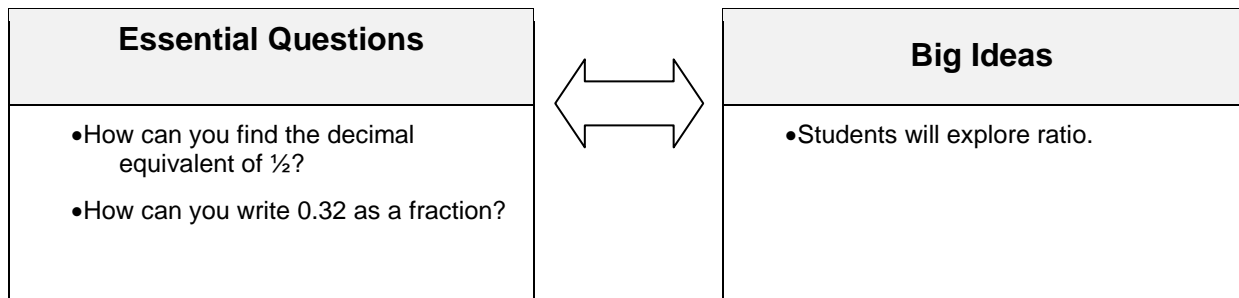
- Direct instruction
- Differentiated instruction
- Interdisciplinary activities
- Cooperative learning activities
- Reinforcement and remediation

### Resources

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- Internet: [www.studyisland.com](http://www.studyisland.com)

<b>Unit Title</b>	<b>Unit 6: Ratio</b>
Time frame	2 weeks
21 <sup>st</sup> Century Themes	Critical Thinking and Problem Solving Communication and Collaboration ICT (Information, Communications and Technology) Literacy Flexibility and Adaptability Initiative and Self-Direction Social and Cross-Cultural Skills Productivity and Accountability
Interdisciplinary focus and technology integration	Technology: Learn how to set up a graph and input different percents. Science: Keep track of the weather for a period of time and find the percentage of the different types. Language Arts: Write a word problem that relates to ratio, probability and percent. Social Studies: Use a map scale to compute actual distance.

**Stage 1: Integrate essential questions, big ideas and learning targets, and ensure it can be differentiated and assessed**



## Assessment

- Formal and Informal Teacher Observations
- Formative checks for understanding and summative assessments
- Tests / Quizzes
- Study Island Assignments
- Supplemental NJ ASK Practice Questions from NJ ASK Workbooks

## Differentiation

- Hands-On Activities
- Diagnostic Assessment (based on content /skill pre-tests)
- Kinesthetic Activities
- Re-teach and Enrichment Activities
- Power Presentations (Activ Boards)
- Cooperative Learning (Flexible Grouping)
- Peer Tutoring
- Tiered Activities

## Stage 2: Backward planning: from the assessment to the learning activities through inquiry

### Content Standards

RP 6.1, 6.2, 6.3 C

MP 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8

### Approaches to Learning

In this unit students will acquire the knowledge to:

- Use ratios to find rate and unit rate.

### Learning Experiences

- Course of study
- Notes and examples
- Practice by homework
- Cumulative review exercises
- Test prep questions
- Hands-on activities and use of manipulatives
- Problem solving activities

### Teaching Strategies

- Direct instruction
- Differentiated instruction
- Interdisciplinary activities
- Cooperative learning activities
- Reinforcement and remediation

### Resources

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