## GRADE 3- Units 3 & 4/Big Ideas Chapters 10-15

### **Mission Statement**

The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.

Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

## **Unit/Module Overview**

In units 3 & 4 students will learn:

- Understand Fractions (Chapter 10)
- Understand Fraction Equivalence and Comparison (Chapter 11)
- Understand Time, Liquid Volume and Mass (Chapter 12)
- Classify Two-Dimensional Shapes (Chapter 13)
- Represent and Interpret Data (Chapter 14)
- Find Perimeter and Area (Chapter 15)

## Standards Covered in Current Unit/Module

Related Standards and Learning Goals

MATH.3.NF.A Develop understanding of fractions as numbers

MATH.3.NF.A.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

MATH.3.M.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

MATH.3.M.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

MATH.3.M.C.6 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

MATH.3.DL.B.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.

MATH.3.G.A Reason with shapes and their attributes

Unit 2/Big Ideas Chapters 5-9 Weekly Learning Activities and Pacing Guide						
Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities			
Big Ideas Chapter 10 (7 days)	MATH.3.G.A Reason with shapes	Obj. We are learning to:  ■ Understand a fraction 1/b as the quantity formed by 1 when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by	<ul> <li>Texts         <ul> <li>Big Ideas</li> </ul> </li> <li>Materials         <ul> <li>Big Ideas materials</li> </ul> </li> </ul>			

	MATH.3.NF.A Develop understanding of fractions as numbers	<ul> <li>a parts of b</li> <li>Understand a fraction as a number on the number line; represent fractions on a number line diagram</li> <li>Suggested Formative Assessment(s):         <ul> <li>My Learning Path weekly progress</li> <li>Diagnostic Growth assessments</li> <li>Teacher observation</li> <li>Class participation</li> <li>Guided practice</li> <li>Individual practice</li> <li>Group work</li> <li>Student workbook</li> <li>Exit tickets for each lesson</li> </ul> </li> </ul>	<ul> <li>Reflex</li> <li>Frax</li> <li>iReady</li> <li>Individual whiteboards</li> </ul>
Big Ideas Chapter 11 (10 days)	<ul> <li>MATH.3.NF.A Develop understanding of fractions as numbers</li> <li>MATH.3.NF.A.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</li> </ul>	<ul> <li>Obj. We are learning to:         <ul> <li>Recognize and generate simple equivalent fractions, (e.g. 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g. by using a visual fraction model.</li> <li>Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers</li> <li>Use comparison symbols (&lt;, &gt;, =) to compare fractions and justify the comparison of two fractions with the same numerator or same denominator)</li> </ul> </li> <li>Suggested Formative Assessment(s):         <ul> <li>My Learning Path weekly progress</li> <li>Diagnostic Growth assessments</li> <li>Teacher observation</li> <li>Class participation</li> <li>Guided practice</li> <li>Individual practice</li> <li>Group work</li> <li>Student workbook</li> <li>Exit tickets for each lesson</li> </ul> </li> </ul>	<ul> <li>Texts</li> <li>Big Ideas</li> <li>Materials</li> <li>Reflex</li> <li>Frax</li> <li>iReady</li> <li>Individual whiteboards</li> </ul>
Big Ideas Chapter 12 (10 days)	MATH.3.M.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and	Obj. We are learning to:  Solve time interval problems  Solve word problems involving addition and subtraction of time intervals in minutes  Estimate and measure liquid volume using metric units of capacity (liters and milliliters)  Estimate and measure masses of objects using	<ul> <li>Texts</li> <li>Big Ideas</li> <li>Materials</li> <li>Big Ideas materials</li> <li>Reflex</li> <li>Frax</li> <li>iReady</li> </ul>

	subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.  • MATH.3.M.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (I). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	standard units of capacity (grams and kilograms)  Use the four operations (addition, subtraction, multiplication, and division) to solve one-step word problems involving masses or volumes that are given in the same unit.)  Suggested Formative Assessment(s):  My Learning Path weekly progress  Diagnostic Growth assessments  Teacher observation  Class participation  Guided practice  Individual practice  Group work  Student workbook  Exit tickets for each lesson	<ul> <li>Individual whiteboards</li> </ul>
Big Ideas Chapter 14 (9 days)	MATH.3.DL.B.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.	Obj. We are learning to:  Draw a scaled picture graph to represent a data set with several categories  Draw a scaled bar graph to represent a data set with several categories  Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs  Suggested Formative Assessment(s):  My Learning Path weekly progress  Diagnostic Growth assessments  Teacher observation  Class participation  Guided practice  Individual practice  Group work  Student workbook	<ul> <li>Texts <ul> <li>Big Ideas</li> </ul> </li> <li>Materials <ul> <li>Big Ideas materials</li> <li>Reflex</li> <li>Frax</li> <li>iReady</li> <li>Individual whiteboards</li> </ul> </li> </ul>

		Exit tickets for each lesson	
Big Ideas Chapter 15 (7 days)	MATH.3.M.C.6 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	Obj. We are learning to:  Solve real world and mathematical problems involving perimeters of polygons  Compare rectangles with the same area and different perimeters, as well as rectangles with the same perimeter and different areas  Solve for an unknown side length give the perimeter of the polygon  Suggested Formative Assessment(s):  My Learning Path weekly progress  Diagnostic Growth assessments  Teacher observation  Class participation  Guided practice  Individual practice  Group work  Student workbook  Exit tickets for each lesson	<ul> <li>Texts         <ul> <li>Big Ideas</li> </ul> </li> <li>Materials         <ul> <li>Big Ideas materials</li> <li>Reflex</li> <li>Frax</li> <li>iReady</li> <li>Individual whiteboards</li> </ul> </li> </ul>
Big Ideas Chapter 13 (8 days)	MATH.3.G.A Reason with shapes and their attribute	<ul> <li>Obj. We are learning to:         <ul> <li>Classify quadrilaterals into categories based on their attributes</li> <li>Express the area of each part of a partitioned shape as a unit fraction of the whole</li> </ul> </li> <li>Suggested Formative Assessment(s):         <ul> <li>My Learning Path weekly progress</li> <li>Diagnostic Growth assessments</li> <li>Teacher observation</li> <li>Class participation</li> <li>Guided practice</li> <li>Individual practice</li> <li>Group work</li> <li>Student workbook</li> <li>Exit tickets for each lesson</li> </ul> </li> </ul>	<ul> <li>Texts         <ul> <li>Big Ideas</li> </ul> </li> <li>Materials         <ul> <li>Big Ideas materials</li> <li>Reflex</li> <li>Frax</li> <li>iReady</li> <li>Individual whiteboards</li> </ul> </li> </ul>

Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc

**ELA Enduring Understanding Statements**