Mathematics Curricular Guide

SIXTH GRADE

2010-2011 SCHOOL YEAR

Mathematics Scope & Sequence

Unit Name: CMP 2-Bits and Pieces I **ACE questions for each investigation are listed. Throughout the unit, please select which ACE questions you feel work best with each problem and be sure to include all ACE questions listed somewhere in the unit.**	**[Starting Date]**	**[Ending Date]**

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.1.A **Compare and order non-negative fractions, decimals**, and integers **using the number line, lists, and the symbols <, >, or =.**	CMP II: Bits and Pieces I Problem 2.1 Equivalent fractions using a number line (scaffolding for comparing and ordering)	3	CMP II: Bits and Pieces I Investigation 2 ACE 12-23, 25-33, 35-40, 59-64, 71-72	Investigation 2 in CMP II focuses more on equivalent fractions in order to compare. CMP I has a few more comparison problems. So some parts of CMP I could be used to supplement in order for students to derive at using equivalent fractions to compare.
	CMP II: Bits and Pieces I Problem 2.2 Equivalent fractions using a number line (scaffolding for comparing and ordering)	3	CMP II: Bits and Pieces I Investigation 2 ACE 12-23, 25-33, 35-40, 59-64, 71-72	
	CMP II: Bits and Pieces I Problem 2.3 Comparing and ordering fractions to benchmarks using symbols and lists.	3	CMP II: Bits and Pieces I Investigation 2 ACE 12-23, 25-33, 35-40, 59-64, 71-72	Before moving on to decimals, extra practice with comparing and ordering fractions is needed to meet 6.1.A.

	CMP Bits and Pieces I Problem 2.5 Fractions Greater than 1	3	Problem 2.5	
Standard	**Lesson & objective**	**Days**	**Formative Assessments/ Assignments**	**Alignment Notes**
6.3.C Represent percents visually and numerically, and **convert between the fractional, decimal,** and percent **representations of a number.**	CMP II: Bits and Pieces I 3.1 Convert between the fractional and decimal representations of a number.	4	Investigation 3 ACE	*Additional practice with conversions is needed. *If you use the hundredths grids to represent decimals, you can make the connection to percents to meet the part of this PE that says "represent percents visually". *Addressed again later in Bits and Pieces III.
	CMP II: Bits and Pieces I 3.2	2	Investigation 3 ACE	
6.1.A **Compare and order non-negative fractions, decimals**, and integers **using the number line, lists, and the symbols <, >, or =.**	CMP II: Bits and Pieces I Investigation 3.3 Comparing decimals to fraction benchmarks.	1	CMP II: Bits and Pieces I Investigation 3 ACE 19-21	
	CMP II: Bits and Pieces I Investigation 3.5 Comparing and ordering decimals using a list.	1	CMP II: Bits and Pieces I Investigation 3 ACE 19-21	
	Extra practice with comparing and ordering decimals and fractions at the same time is needed to meet 6.1.A.	2	CMP Skill Sheets Prentice Hall Skill Intervention Kit	

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.3.C Represent percents visually and numerically, and **convert between the fractional, decimal,** and percent **representations of a number.**	CMP II: Bits and Pieces I Investigation 4.2	1		***On page 57, adjust Problem B (Naomi) from 10 of 13 to 10 of 15.
	CMP II: Bits and Pieces I Investigation 4.3	1		
	CMP II: Bits and Pieces I Investigation 4.4	2		
Process Standards Addressed: NONE				
Assessment: Common Assessment (needs to be developed)				

Unit Name: How Likely Is It? (Probability)	[Starting Date]	[Ending Date]

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.3.F **Determine the experimental probability of a simple event using data collected in an experiment**.	How Likely Is It? Problem 1.1 & Follow-Up Determine the experimental probability of data collected by flipping a coin.	1	Investigation 1 ACE 1-5	*Does not represent probabilities as a decimal or percent; needs to be intentionally addressed by teacher.
	How Likely Is It? Problem 3.1 Determine the experimental probability of data collected from a spinner.	1		
	How Likely Is It? Problem 3.1 Follow-Up Analyze spinner to lead to expected value/ theoretical probability due to differing sizes on spinner.	1	Investigation 3 ACE 2	

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.3.G **Determine the theoretical probability of an event and its complement and represent the probability as a fraction** or decimal **from 0 to 1 or as a percent from 0 to 100.**	How Likely Is It? Problem 4.1 & Follow-Up Determine the theoretical probability and represent the probability as a fraction between 0 and 1.	2	Investigation 4 ACE 1-3	*Does not represent probabilities as a decimal or percent; needs to be intentionally addressed by teacher. *Must do ACE question #1 to address the complement piece of this PE. *Must do ACE question #3 to address the percent piece of this PE.
	How Likely Is It? Problem 4.3 Find possible combinations to determine the theoretical probability as a fraction between 0 and 1.	2	Investigation 4 ACE 6-10	*Does not represent probabilities as a decimal or percent; needs to be intentionally addressed by teacher. *Does 4.3 cover a 7th grade PE?
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: CMP 2-Bits and Pieces II **ACE questions for each investigation are listed. Throughout the unit, please select which ACE questions you feel work best with each problem and be sure to include all ACE questions listed somewhere in the unit.**	**[Starting Date]**		**[Ending Date]**	
Standard	**Lesson & objective**	**Days**	**Formative Assessments/ Assignments**	**Alignment Notes**
6.1.B **Represent multiplication and division of nonnegative fractions** and decimals **using area models and the number line, and connect each representation to the related equation.**	CMP II: Bits and Pieces II 3.1 Estimate products with fractions. Represent multiplication of nonnegative fractions using area models and connect each representation to the related equation.	2	Investigation 3 ACE 1,2,4,5-10, 12-13, 16, 18	
6.1.C Estimate **products** and quotients of **fractions** and decimals. *Estimating quotients of fractions is not covered (gap needs to be addressed)	CMP II: Bits and Pieces II Problem 3.1D Estimate products of fractions	1	Investigation 3 ACE 11	Needs additional practice with estimating products of fractions
	CMP II: Bits and Pieces II 3.2 Estimate products with fractions. Represent multiplication of nonnegative	2	Investigation 3 ACE 1,2,4,5-10, 12-13, 16, 18	

	fractions using the number line and connect each representation to the related equation.			
Standard	**Lesson & objective**	**Days**	**Formative Assessments/ Assignments**	**Alignment Notes**
	CMP II: Bits and Pieces II Problem 3.3	2		This is a transitional lesson that uses estimating and modeling to move forward to an algorithm.
6.1.D **Fluently and accurately multiply** and divide **non-negative fractions** and explain the inverse relationship between multiplication and division with fractions.	CMP II: Bits and Pieces II Problem 3.4 Multiplication with mixed numbers	2	Investigation 3 ACE	Needs additional practice multiplying fractions to build fluency and accuracy. 6.1.C – estimating products of fractions is embedded in problem 3.1D 3.4D contains some algebra practice
	CMP II: Bits and Pieces II Problem 3.5 Writing a multiplication algorithm for fractions	2	Investigation 3 ACE	

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.1.D **Fluently and accurately** multiply and **divide non-negative fractions** and explain the inverse relationship between multiplication and division with fractions.	CMP II: Bits and Pieces II Problem 4.1 Represent division of whole number by a fraction using area models or the number line, and connect each representation to the related equation.	2	Investigation 4 ACE questions	Needs additional practice dividing fractions to build fluency and accuracy. (3rd day is for fluency practice)
	CMP II: Bits and Pieces II Problem 4.2 Represent division of fraction by a whole number using area models or the number line, and connect each representation to the related equation.	2	Investigation 4 ACE questions	Needs additional practice dividing fractions to build fluency and accuracy.
6.1.D **Fluently and accurately** multiply and **divide non-negative fractions** and explain the inverse relationship between multiplication and division with fractions.	CMP II: Bits and Pieces II Problem 4.3 Represent division of fraction by a fraction using area models or the number line, and connect each representation to the related equation.	2	Investigation 4 ACE questions	Area model and number line can be used with these problems/ACE questions in order to reinforce this PE. Needs additional practice dividing fractions to build fluency and accuracy.
	CMP II: Bits and Pieces II Problem 4.4	2	Investigation 4 ACE	

	Writing a division algorithm for fractions			
Standard	**Lesson & objective**	**Days**	**Formative Assessments/ Assignments**	**Alignment Notes**
6.1.H **Solve single- and multi-step word problems involving operations with fractions** and decimals and **verify the solutions.**	Embedded throughout unit			
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem. 6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: CMP II-Bits and Pieces III **ACE questions for each investigation are listed. Throughout the unit, please select which ACE questions you feel work best with each problem and be sure to include all ACE questions listed somewhere in the unit.**	**[Starting Date]**	**[Ending Date]**

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.1.B **Represent multiplication** and division **of nonnegative** fractions and **decimals using area models and the number line, and connect each representation to the related equation**. 6.1.C **Estimate products** and quotients of fractions and **decimals.** 6.1.F **Fluently and accurately multiply** and divide **non-negative decimals.** 6.1.G **Describe the effect of multiplying** or dividing a number by one, by zero, **by a number between zero and one, and by a number greater than one.** 6.1.H **Solve single- and multi-step word problems involving operations with fractions and decimals and verify the solutions**.	CMP II: Bits and Pieces III 2.1 Estimate products of decimals	3	Investigation 2 ACE 1-12, 24-26	***very limited*** ***Needs additional practice with multiplication of decimals& estimation of decimal products.*** ***Ideas for mastering fluency:*** ***White boards, direct instruction*** ***Prentice Hall*** ***Intervention Kit***
	CMP II: Bits and Pieces III 2.2 Finding the missing factors	1	Investigation 2 ACE	
	CMP II: Bits and Pieces III 2.3 Estimating decimal products. Finding decimal products.	1	Investigation 2 ACE	

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.1.E **Multiply** and divide **whole numbers and decimals by 1000, 100, 10, 1, 0.1, 0.01, and 0.001.**	Multiplication: Bits and Pieces III 2.4 Investigation 2 ACE #20 Division: Bits and Pieces III 3.3 Investigation 3 ACE #19,20 Understanding factor-product relationships	4	Investigation 2 ACE	
6.1.B **Represent** multiplication and **division of nonnegative** fractions and **decimals using area models and the number line, and connect each representation to the related equation.** 6.1.C **Estimate** products and **quotients of** fractions and **decimals.** 6.1.F **Fluently and accurately** multiply and **divide non-negative decimals**. 6.1.H **Solve single- and multi-step word problems involving operations with** fractions and **decimals and verify the solutions.**	CMP II: Bits and Pieces III Investigation 3.1 Dividing decimal word problems. *Note: Purpose is to define what the division operation means – "regrouping, sharing" Conceptual development*	1	Investigation 3 ACE 1,2,4,5-10, 12 Investigation 3 ACE	*Must have students use area models, number lines, and write equations for each situation in order to meet PE 6.1.B.
	CMP II: Bits and Pieces III Problem 3.2 Estimating quotients. Using common denominators to divide decimals *Note: Numbers in "B" overshoot the OSPI Test and Item Specs, not necessary*	2	Investigation 3 ACE	*This lesson focuses on the conceptual development of division. If your students already possess the conceptual understanding of division, please approach this problem using the standard algorithm.

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	CMP II: Bits and Pieces III Problem 3.3 Dividing decimals	2	Investigation 3 ACE	
	CMP II: Bits and Pieces III Problem 3.4 Representing fractions as decimals	4	Investigation 3 ACE	***Extra time is built in because students need additional practice dividing decimals and estimating decimal quotients.***
6.1.G Describe the effect of multiplying or dividing a number by one, by zero, by a number between zero and one, and by a number greater than one. (gap)		?		• Develop lessons that build upon the identified lessons in the alignment tool. • Additional practice is required.
6.1.E Multiply and divide whole numbers and decimals by 1000, 100, 10, 1, 0.1, 0.01, and 0.001. (gap)		?		• Prentice Hall Intervention Kit
6.3.C **Represent percents visually and numerically, and convert between the fractional, decimal, and percent representations of a number.**	CMP II: Bits and Pieces III Problem 3.4 Representing fractions as decimals	4	Investigation 3 ACE 25-27, 37-40	*Need additional practice working with conversions between different representations. *Visual representations of percents is limited to circle graphs.
6.3.D Solve single- and multi-step word problems involving ratios, rates, and percents, and verify the solutions. Partial Gap (Percents met - not ratios, rates)	Bits and Pieces III – Investigation 4.1	2		
	Investigation 4.2	3		
	Investigation 4.3	2		

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	CMP II: Bits and Pieces III Problem 5.1 & 5.2 Problem Solving	2	Investigation 5 ACE 22, 31	
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem. 6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: GAP(Ratio, Rate, & Percent) **ACE questions for each investigation are listed. Throughout the unit, please select which ACE questions you feel work best with each problem and be sure to include all ACE questions listed somewhere in the unit.**	**[Starting Date]**	**[Ending Date]**

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.3. A Identify and write ratios as comparisons of part-to-part and part-to-whole relationships.	Prentice Hall Intervention Kit			
6.3.B Write ratios to represent a variety of rates.				
6.3.D Solve single- and multi-step word problems involving ratios, rates, and percents, and verify the solutions.				

Process Standards Addressed:

6.6.A Analyze a problem situation to determine the question(s) to be answered.
6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem.
6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem.
6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution.
6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.
6.6.F Apply a previously used problem-solving strategy in a new content.
6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.
6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.

Assessment: Common Assessment (needs to be developed)

Unit Name: Variables and Patterns	[Starting Date]	[Ending Date]

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	Variables and Patterns 1.1	2		*2 days is necessary for modeling and management of tasks *Necessary to do 1.2, which is a 6th grade PE
6.2.B Draw a first-quadrant graph in the coordinate plane to represent information in a table or given situation.	Variables and Patterns 1.2	2	Investigation 1 ACE 1,2,3,8	*First quadrant graphing is done throughout the book.
6.2.A Write a mathematical expression or equation with variables to represent information in a table or given situation.	Variables and Patterns Problem 3.1 and Follow-Up Introduction to math expressions and equations	2	Investigations 3 ACE 3-4	*Students need to represent both sets of data as a table and graph (double line graph). Expressions & equations are inferred and need to be pulled out by teacher during summary of lesson to represent Adrian's bike shop.
	Variables and Patterns Problem 3.3 Solve word problems using mathematical expressions and equations and verify solutions.	1		Inferred and needs to be pulled out by teacher during summary of lesson.

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	Variables and Patterns Problem 3.4 (extension of 3.3) & Follow-Up Solve word problems using mathematical expressions and equations and verify solutions.	3	Investigation 3 ACE 1-2	Day 1: Do A-B Day 2: Do C and intentionally add a column for the equation for the total cost Day 3: Do D add a column for the equation for the total cost AND Follow-Up
	Variables and Patterns Problem 4.1 & Follow-Up	2	Investigation 4 ACE 10	
	Variables and Patterns Problem 4.2 & Follow-Up	2	Investigation 4 ACE 7	Day 1: A-C Day 2: D-F & Follow-Up
	Variables and Patterns Problem 4.3 & Follow-Up	1	Investigation 4 ACE 11-12	
6.2.F Solve word problems using mathematical expressions and equations and verify solutions. 6.2.A Write a mathematical expression or equation with variables to represent information in a table or given situation.	Additional Practice with writing and solving a mathematical expressions or equations with variables to represent information in a table or given situation.	4		• CMP2 Skills sheets from CMP2 disc • Prentice Hall Intervention Kit

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.2.C Evaluate mathematical expressions when the value for each variable is given. Gap			Variables and Patterns Investigation 4 ACE 2, 7, 10	*Offers ACE questions, but no lesson that addresses this PE. • Classroom activities: whiteboards in whole group, small group, individual and practice worksheets from various websites (identified at a later date) • Prentice Hall Intervention Kit
6.2.D Apply the commutative, associative, and distributive properties, and use the order of operations to evaluate mathematical expressions. Gap				• Using a variety of GLAD strategies (input charts for order of operations and properties, etc.), introduce the order of operations, commutative, associative, and distributive properties. • Reinforce the concept of fact families from elementary and introduce new vocabulary for properties. • Classroom activities: whiteboards in whole group, small group, individual and practice worksheets from various websites (identified at a later date) • Pre and post-test (see Ochoa's version for revision) • Identify parts of existing OSPI modules that meet 6.2.D. • Prentice Hall Intervention Kit

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.2.E Solve one-step equations and verify solutions. Gap				• Accumulate additional practice (whiteboards, problem solving, worksheets, ORIGO, etc.) for use after teaching the identified lessons for related PE's in *Variables and Patterns*. • Identify parts of existing OSPI modules that meet 6.2.E. • Prentice Hall Intervention Kit
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem. 6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: Covering and Surrounding	[Starting Date]	[Ending Date]

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.3.E **Identify the ratio of the circumference to the diameter of a circle as the constant π, and recognize 22/7 and 3.14 as common approximations of π.** 6.4.A **Determine the circumference and area of circles.** 6.4.C **Solve single- and multi-step word problems involving the relationships among radius, diameter, circumference, and area of circles, and** verify the solutions**.**	Covering and Surrounding Problem 7.1 Main purpose is to familiarize kids with vocabulary Single- and multi-step word problems involving the relationships among radius, diameter, circumference, and area of circles	1	Investigation 7 ACE 1-5, 9-15	Very limited Must be implied by teacher Recognize 22/7 and 3.14 as common approximations of π is only present in a "Did you know?" box in Investigation 7 ACE questions
	Covering and Surrounding Problem 7.2 Measuring objects to derive at the ratio of the circumference to the diameter of a circle as the constant π	2	Investigation 7 ACE 1-5, 9-15	Very limited Must be implied by teacher *Add a column in Question A that has students write a ratio of circumference over diameter for each measurement
	Covering and Surrounding 7.3 Exploring the area of a circle	1	Investigation 7 ACE 1-5, 9-15	
	Covering and Surrounding 7.4 "Squaring" a circle to derive at pi	2	Investigation 7 ACE 1-5, 9-15	

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	Practice for determining the circumference and area of a circle is needed	4		*CMP2 Skills sheet from CMP2 disc *Prentice Hall Intervention Kit
6.4.B Determine the perimeter and area of a composite figure that can be divided into triangles, rectangles, and parts of circles. Gap				• Accumulate additional practice for finding area and perimeter of composite figures. • Prentice Hall Intervention Kit • Identify parts of existing OSPI modules that meet 6.4.B.
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem. 6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: Filling and Wrapping	[Starting Date]	[Ending Date]

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.4.G Describe and sort polyhedra by their attributes: parallel faces, types of faces, number of faces, edges, and vertices. Gap		?		• GLAD pictorial input chart for introducing vocabulary for polyhedra. • Provide teachers with cardstock polyhedra or purchase 7 sets with nets for each teacher? • Develop a lesson where students would identify the attributes for each polyhedra listed in the standard, then use those to sort into groups. • Prentice Hall Intervention Kit
6.4.D Recognize and draw two-dimensional representations of three-dimensional figures. 6.4.E Determine the surface area and volume of rectangular prisms using appropriate formulas and explain why the formulas work.	Filling and Wrapping 1.1 Recognize and draw two-dimensional representations of cube	2		
	Filling and Wrapping 1.2 Recognize and draw two-dimensional representations of rectangular prism	2		

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
	Filling and Wrapping 1.4 Conceptual development for surface area and volume	1	Investigation 1 ACE 2-7, 8, 10	
	Filling and Wrapping 2.1 Determine the surface area and volume of rectangular prisms to begin seeing patterns	2		
	Filling and Wrapping 2.2 & Follow-Up Determine the surface area and volume of rectangular prisms to derive at the formula	2	Investigation 2 ACE	
	Filling and Wrapping 3.1 & Follow-Up Finding volumes of boxes – helps derive at volume formula	2	Investigation 3 ACE	
	Additional practice is necessary for volume and surface area of prisms	4		*2 days spent on conceptual piece where students are working with hands on materials *2 days of practice using formulas

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.4.F Determine the surface area of a pyramid. Gap		?		• Review formulas for area of a triangle and square/rectangle. • Relationship between the 3-D form of triangular and square pyramids and nets. • Accumulate additional practice for finding surface area of pyramids. (Ochoa) • Prentice Hall Intervention Kit • Glencoe website
Process Standards Addressed: 6.6.A Analyze a problem situation to determine the question(s) to be answered. 6.6.B Identify relevant, missing, and extraneous information related to the solution to a problem. 6.6.C Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem. 6.6.D Represent a problem situation, describe the process used solve the problem, and verify the reasonableness of the solution. 6.6.E Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language. 6.6.F Apply a previously used problem-solving strategy in a new content. 6.6.G Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning. 6.6.H Make and test conjectures based on date (or information) collected from explorations and experiments.				
Assessment: Common Assessment (needs to be developed)				

Unit Name: Additional Key Content	[Starting Date]	[Ending Date]

Standard	Lesson & objective	Days	Formative Assessments/ Assignments	Alignment Notes
6.5.A Use strategies for mental computations with non-negative whole numbers, fractions, and decimals. (Gap needs to be filled)		?		*Number Talks - buy book for each teacher or grade level? *Professional development on how to do and write number talks. *CMP does not focus on mental computations, but does encourage students to explore multiple strategies.
6.5.B **Locate positive and negative integers on the number line and use integers to represent quantities in various contexts.** 6.5.C **Compare and order positive and negative integers using the number line, lists, and the symbols <, >, or =.**	Accentuate the Negative Problem 1.1 Identify integers in a real-life context.	1	Investigation 1 ACE	*Be intentional about students identifying points as positive or negative integers. *Introduce the number line.
	Accentuate the Negative Problem 1.2 & Follow-Up Compare and order positive and negative integers using the number line, lists, and the symbols <, >, or =.	1	Investigation 1 ACE	*Have students order the team points on number line.
	Accentuate the Negative Problem 1.3 & Follow-Up Locate positive and negative integers on the number line and use integers to represent quantities in various contexts.	2	Investigation 1 ACE	
Process Standards Addressed: NONE				
Assessment: Common Assessment (needs to be developed)				