

Pre-Algebra: Turner, 2018-2019

Month(s)	Topic/Theme/Chapter/Unit	Essential Questions	Common Core and/or State Standard	SLE	Assessments (Formative & Summative - Varying Types)
First Trimester: Sept-Nov	Expressions and Equations Math Course 3: Chapter 1 Chapter 3 Teacher Resources Order of Operations, powers, exponents, solving equations, solving two-step equations, solving inequalities.	How does an expression relate to a phrase? How does an equation relate to a sentence? What is the difference between an inequality and an equation?	<u>CCSS.MATH.CONTENT.7.EE.A.1</u> <u>CCSS.MATH.CONTENT.7.EE.A.2</u> <u>CCSS.MATH.CONTENT.7.EE.B.3</u> <u>CCSS.MATH.CONTENT.7.EE.B.4</u> <u>CCSS.MATH.CONTENT.7.EE.B.4.A</u> <u>CCSS.MATH.CONTENT.7.EE.B.4.B</u>	Ask questions and explore new learning opportunities Listen attentively and communicate ideas clearly Practice problem solving and critical thinking	Formative Assessment Quiz on Chapter 1 Informal formative assessment on Matrices using Dream Houses Formal Summative Assessment (Test) on Chapters 1 and 3 Informal formative exit tickets and cooperative group work throughout section
First Trimester: Oct-Nov	Number System Math Course 3: Chapter 2 Chapter 4 Teacher Resources Adding, subtracting, multiplying, dividing integers, distributive property, prime factorization, simplifying fractions, exponents.	Why is it important to know the different types of numbers? What rules apply to which operations? What does prime factorization show us?	<u>CCSS.MATH.CONTENT.7.NS.A.1</u> <u>CCSS.MATH.CONTENT.7.NS.A.1.A</u> <u>CCSS.MATH.CONTENT.7.NS.A.1.B</u> <u>CCSS.MATH.CONTENT.7.NS.A.1.C</u> <u>CCSS.MATH.CONTENT.7.NS.A.1.D</u>	Collaborate and engage with others respectfully Develop effective and responsible study habits	Formative Assessment Quiz on Chapter 2 Formal Summative Assessment (Test) on Chapter 2 Formal Summative Assessment (Test) on Chapter 4 Informal formative exit tickets and cooperative group work throughout section
2nd Trimester: Dec	Number System Math Course 3: Chapter 5 Teacher Resources	Why is it important to know the different types of numbers?	<u>CCSS.MATH.CONTENT.7.NS.A.2</u> <u>CCSS.MATH.CONTENT.7.NS.A.2.A</u> <u>CCSS.MATH.CONTENT</u>	Ask questions and explore new learning opportunities	Formative Assessment Quiz on Chapter 5 Informal formative assessment on fractions and mixed numbers using the

	Rational number operations with fractions, decimals, and mixed numbers		ENT.7.NS.A.2.B CCSS.MATH.CONTENT.ENT.7.NS.A.2.C CCSS.MATH.CONTENT.ENT.7.NS.A.2.D		<p>spaghetti problem</p> <p>Informal formative exit tickets and cooperative group work throughout section</p>
2nd Trimester: Jan	<p>Expressions and Equations</p> <p>Math Course 3: Chapter 6 Teacher Resources</p> <p>Multi-Step equations, equations with variables on both sides, equations with fractions and decimals</p>	<p>How can we get all variables to one side of an equation?</p> <p>How can we write an equation that might have a variable on both sides?</p>	CCSS.MATH.CONTENT.ENT.8.EE.C.7 CCSS.MATH.CONTENT.ENT.8.EE.C.7.B	<p>Ask questions and explore new learning opportunities</p> <p>Practice problem solving and critical thinking</p>	<p>Formal Summative Assessment (Test) on Chapter 6</p> <p>Informal formative assessment on formulas using measurements to find pi</p> <p>Informal formative exit tickets and cooperative group work throughout section</p>
2nd Trimester: Jan-Feb	<p>Ratios and Proportional Relationships</p> <p>Math Course 3: Chapter 7 Teacher Resources</p> <p>Solving proportions, solving percent problems, percent of change</p>	<p>How can we turn a proportion into an equation?</p> <p>What is an easy way to remember how to set up a proportion?</p> <p>How does percent change relate to a proportion?</p>	CCSS.MATH.CONTENT.ENT.7.RP.A.1 CCSS.MATH.CONTENT.ENT.7.RP.A.2 CCSS.MATH.CONTENT.ENT.7.RP.A.2.A CCSS.MATH.CONTENT.ENT.7.RP.A.2.B CCSS.MATH.CONTENT.ENT.7.RP.A.2.C CCSS.MATH.CONTENT.ENT.7.RP.A.3	<p>Listen attentively and communicate ideas clearly</p> <p>Use technology responsibly and effectively</p>	<p>Formal Summative Assessment (Test) on Chapter 7</p> <p>Informal formative assessment on solving proportions and equations through making a puzzle</p> <p>Informal formative exit tickets and cooperative group work throughout section</p>
2nd/3rd Trimester: Mar-May	<p>Geometry</p> <p>Math Course 3: Chapter 8 Chapter 9 Chapter 10</p>	<p>How can we use transformations in real life?</p> <p>How does the coordinate plane relate to shapes?</p>	CCSS.MATH.CONTENT.ENT.7.G.A.1 CCSS.MATH.CONTENT.ENT.7.G.A.2 CCSS.MATH.CONTENT	<p>Ask questions and explore new learning opportunities</p> <p>Collaborate and</p>	<p>Formative Assessment Quiz on Chapter 8</p> <p>Informal formative assessment on transformations using flips books</p>

	<p>Teacher Resources</p> <p>Polygons, transformations, real numbers, Pythagorean theorem, right triangles, area, volume, surface area</p>		<p>ENT.7.G.A.3</p> <p>CCSS.MATH.CONTENT.7.G.B.4</p> <p>CCSS.MATH.CONTENT.7.G.B.5</p> <p>CCSS.MATH.CONTENT.7.G.B.6</p>	engage with others respectfully	<p>Formal Summative Assessment (Test) on Chapter 8</p> <p>Formal Summative Assessment (Test) on Chapter 9</p> <p>Formative Assessment Quiz on Chapter 10</p>
<p>3rd Trimester: May-June</p>	<p>Statistics and Probability</p> <p>Math Course 3: Chapter 12</p> <p>Teacher Resources</p> <p>Stem-Leaf Plots, Box-and-Whisker Plots, Permutations, Combinations, Probability and Odds</p>	<p>Where does statistics and probability arise in the real world?</p> <p>How can we visually show statistics and probability?</p>	<p>CCSS.MATH.CONTENT.7.SP.A.1</p> <p>CCSS.MATH.CONTENT.7.SP.A.2</p> <p>CCSS.MATH.CONTENT.7.SP.B.3</p> <p>CCSS.MATH.CONTENT.7.SP.B.4</p> <p>CCSS.MATH.CONTENT.7.SP.C.5</p> <p>CCSS.MATH.CONTENT.7.SP.C.6</p> <p>CCSS.MATH.CONTENT.7.SP.C.7</p>	<p>Listen attentively and communicate ideas clearly</p> <p>Use technology responsibly and effectively</p> <p>Develop effective and responsible study habits</p>	<p>Informal formative exit tickets and cooperative group work throughout section</p> <p>Cooperative/Independent Statistics/Probability Project</p> <p>End of the year summative assessment that will cover the majority of topics</p>
<p>3rd Trimester: (If time permits)</p>	<p>Algebra Standards</p> <p>Math Course 3: Chapter 11 Chapter 13</p> <p>Teacher Resources</p> <p>Graphs of linear equations, slope, slope-intercept form, polynomials, multiplying binomials</p>	<p>How can we see an equation visually?</p> <p>How can we put an equation on a coordinate plane?</p>	<p>CCSS.MATH.CONTENT.HSA.CED.A.2</p> <p>CCSS.MATH.CONTENT.HSA.REI.D.10</p>	<p>Ask questions and explore new learning opportunities</p> <p>Practice problem solving and critical thinking</p>	

Two Types of Assessment:

Formative Assessment occurs in the short term, as learners are in the process of making meaning of new content and of integrating it into what they already know. Feedback to the learner is immediate (or nearly so), to enable the learner to change his/her behavior and understandings right away. Formative Assessment also enables the teacher to "turn on a dime" and rethink instructional strategies, activities, and content based on student understanding and performance. Formative Assessment can be as informal as observing the learner's work or as formal as a written test. Formative Assessment is the most powerful type of assessment for improving student understanding and performance.

Examples: a very interactive class discussion; a warm-up, closure, or exit slip; a on-the-spot performance; a quiz.

Summative Assessment takes place at the end of a large chunk of learning, with the results being primarily for the teacher's or school's use. Results may take time to be returned to the student/parent, feedback to the student is usually very limited, and the student usually has no opportunity to be reassessed. Thus, Summative Assessment tends to have the least impact on improving an individual student's understanding or performance. Students/parents can use the results of Summative Assessments to see where the student's performance lies compared to either a standard (MEAP/MME) or to a group of students (usually a grade-level group, such as all 6th graders nationally, such as Iowa Tests or ACT). Teachers/schools can use these assessments to identify strengths and weaknesses of curriculum and instruction, with improvements affecting the next year's/term's students.

Examples: End of unit exams, major cumulative projects, research projects, and performances/presentations