

UNIT OF STUDY

<p>Title: Getting Ready for Algebra Using the Language of Algebra</p> <p>Topic: simplify expressions and applying the order of operations writing and simplifying algebraic expressions</p> <p>Designer: K. Henderson</p>	<p>Subject/Course: 9th Res. Math</p>	<p>Length: 2 weeks</p>
UNIT GOALS AND EXPECTATIONS		
<p>IMPORTANT CONCEPTS/UNDERSTANDINGS:</p> <p><u>simplify expressions</u></p> <ul style="list-style-type: none"> • with integers (add, subtract, multiply, or divide) • with rational numbers (fractions and decimals) • square roots and cube roots <p>Apply the order of operations to evaluate expressions.</p> <p>writing & simplifying algebraic expressions</p>	<p>ESSENTIAL QUESTIONS:</p> <ul style="list-style-type: none"> • What is an integer? • What is an exponent? • What is the base? • What is a square root? • What is a variable, algebraic expression, term, and coefficient? • How do you classify a polynomial? • How do you determine the degree of a polynomial? 	
<p>STUDENT LEARNING EXPECTATIONS:</p> <ul style="list-style-type: none"> • LA.1.AI.1 – Evaluate algebraic expression, including radicals, by applying the order of operations. • LA.1.AI.2 – translate word phrases and sentences into expressions, equations, and inequalities, and vice versa. 		
<p>SPECIFIC DECLARATIVE KNOWLEDGE – What I know</p> <p>Vocabulary words – integer, exponent, base, square root, order of operations, variable, algebraic expression, term, constant, radical sign, coefficient, monomial, binomial, trinomial, polynomial, degree.</p>	<p>SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do</p> <ul style="list-style-type: none"> • add, subtract, multiply and divide two or more integers. • simplify expression involving fractions and decimals • simplify square roots and cube roots. • apply the order of operations to evaluate mathematical expressions. • define algebraic vocabulary. • identify the coefficient of a term. • classify polynomials by the number of terms • find the degree of a monomial • find the degree of a polynomial 	
UNIT ASSESSMENTS (Include tasks related to Dimensions 3 and 4 and Bloom’s Taxonomy)		
<p>open response question</p> <ul style="list-style-type: none"> • requiring the student to use the order of operations (application) • writing/ simplifying expression (application) 		

Traditional Assessments: independent practice worksheets Test	Other Evidence of Learning: notes guided practice observation marker board review
----------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------

ACTIVITIES AND LEARNING EXPERIENCES	Resources
<p>1. 4 step vocabulary to introduce key words from the unit.</p> <p>2. Lessons 1.2 – 1.5 simplifying expressions and using the order of operations. *demonstrate how to find answer for numbers with exponents using the expanded form. *explain steps involved when baking a cake – do the directions make any difference on the outcome.</p> <p>3. Lesson 2.1 – writing and simplifying algebraic expressions *Speaking a foreign language such as Spanish or French – if you don't know the language, you don't know what to do. The same applies with math.</p> <p>4. marker board review – group review</p>	<p>4 step worksheet</p> <p>Algebra's Cool DVD program Unit A</p> <p>Algebra's Cool DVD program Unit A</p> <p>marker board & eraser</p>

Career Connections	
construction, business industry, banking/accounting, cook / chef	