Mathematics
Algebra 1: CP
Unit 8: Laws of Exponents

Essential Understandings	▪ The laws of exponents are very important to future mathematical work.
Essential Questions	▪ What are the multiplication laws of exponents? ▪ How do I evaluate powers with negative exponents? ▪ How do I evaluate powers with zero as their exponent? ▪ What are the division laws of exponents?
Essential Knowledge	▪ There are many multiplication laws of exponents. ▪ There are rules for negative exponents. ▪ There are rules of zero as an exponent. ▪ There are many division laws of exponents
Vocabulary	▪ Terms: o power, base, exponent, product of powers property, power of a power property, power of a product property, zero exponents, negative exponents, quotient of a powers property, power of a quotient property
Essential Skills	▪ Use the multiplication laws of exponents. ▪ Evaluate powers with negative exponents. ▪ Evaluate powers with zero as their exponent. ▪ Use the division laws of exponents.

Related Maine Learning Results	Mathematics
	D. Algebra
	  Symbols and Expressions
	  D1.Students understand and use polynomials and expressions with rational exponents.
	    a. Simplify expressions including those with rational numbers.
	    b. Add, subtract, and multiply polynomials.
	    c. Factor the common term out of polynomial expressions.
	    d. Divide polynomials by $(ax+b)$.

Sample Lessons And Activities	▪ Students will orally respond to questions. ▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.
Sample Classroom Assessment Methods	▪ Evaluate homework ▪ Quizzes ▪ Chapter test
Sample Resources	▪ Publications: o Algebra 1 - McDougall Littell