

Mathematics
Unit 1: Algebra Concepts

Essential Understandings	<ul style="list-style-type: none"> ▪ Patterns can be found in many forms.
Essential Questions	<ul style="list-style-type: none"> ▪ How does one describe a pattern? ▪ How can a pattern be used to make a prediction? ▪ How does one extend a pattern? ▪ How can finding patterns help with counting? ▪ How can one use skip counting to count by 2s to 20, 5s to 100, and 10s to 100? ▪ How does one solve for unknowns?
Essential Knowledge	<ul style="list-style-type: none"> ▪ Patterns can be used to make predictions. ▪ There are patterns in numbers. ▪ Patterns can be used to skip count. ▪ Patterns can be used to solve addition and subtraction problems. ▪ Number patterns and relationships can be represented using variables.
Vocabulary	<ul style="list-style-type: none"> ▪ <u>Terms:</u> <ul style="list-style-type: none"> ○ variable, addend, subtrahend, sum, operation, true, false, unknown
Essential Skills	<ul style="list-style-type: none"> ▪ Identify, reproduce, create, extend, and compare increasingly complex patterns (i.e., aabaab, abcbabcb). (I, R) ▪ Identify patterns of numbers when skip counting by 2s to 20, 5s to 100, and 10s to 100. (A) ▪ Identify and write the missing addend and/or subtrahend with sums to 10 and the related subtraction fact. (I, R, A)
Related Maine Learning Results	<p>A. Number Whole Number A2.Students understand and use procedures to add and subtract whole numbers with one and two digits. b. Use an operation appropriate to a given situation.</p> <p>D. Algebra Equations and Inequalities D2.Students understand that the equal sign means, “is the same as.” a. Identify true and false number sentences. c. Find solutions for unknowns in simple open number sentences such as $12 = 4 + []$.</p> <p>Functions and Relations D3.Students understand how to create, identify, describe, and extend patterns given a pattern or a rule. a. Describe, extend and create repeating patterns. b. Describe, extend, and create growing patterns.</p>