

## Pre-Algebra Year 2

Unit Title	Integers Around Me	Rationalize Powers and Roots	Dollars and Sense	Solving the Unknown	What are the Odds?	Picture This
<b>SOI</b>	Using logical generalizations about integers we can track change over space and time.	Understanding the relationship and the processes of equivalence and simplification allows for problem solving.	Equivalent ratios can represent proportional relationships in order to model real world situations	Algebra follows a logical system of reasoning using variables to represent the unknown, supporting science and technical innovation.	Logic allows us to calculate probabilities and evaluate statistics to help make informed	We use measurements to describe real world objects.
<b>Key Concept</b>	Logic	Relationships	Relationships	Logic	Logic	Form
<b>Related Concepts</b>	Change Generalizations	Equivalence Simplification	Equivalence Representation	Systems Representation	Justification	Model, measurement
<b>Global Context</b>	Orientation in Time and Space ( <i>integers allow us to track positive and negative movement</i> )	Scientific and Technological Innovation	Identities and Relationships	Scientific and technological Innovation	Fairness and Development	Orientation in Space and Time
<b>Criterion</b>	A. i,ii,iii C. i,ii,iii,iv,v D. i,ii	A. i,ii,iii B. i,ii,iii	A. i,ii,iii B. i,ii,iii D.i,ii	A. i,ii,iii B. i,ii,iii C. i,ii,iii,iv,v	A. i,ii,iii C.. i,ii,iii,iv,v D. i,ii	A. i,ii,iii D. i,ii
<b>ATL</b>	Communication Self-Management Thinking	Communication Self-Management	Self-Management Thinking	Communication Self-Management Thinking	Research Self-Management Social	Social Thinking
<b>Content</b>	Problem solving strategies, variables and expressions, represent information using words, equations, tables, graphs Absolute value, integer operations, 4 quadrant graphing	Operations with fractions, decimals, rational numbers, positive and negative exponents, monomials, scientific notation, square roots, cube roots, real numbers	Ratios, unit rates, proportions, similar figures, indirect measurement, percents, percent of change, discount and mark-up, simple and compound interest, financial literacy	Like terms, constant, coefficient, exponent, variable, index notation, distributive property, factoring, expanding, simplifying, functions and slope!	Mean, median, mode, range, outlier, tree diagrams, complementary events	Angle/line relationships, triangles, polygons, transformations, dilations, similarity, circles, area, volume, surface area of prisms (triangle, pyramid, spheres, cone, cylinder)