Level I Tentative Syllabus

Chapter 1: Exploring Integers on the Number Line
Day 1- Building Number Lines
  • Positive and Negative Integers
  • Greater and Less Than
Day 2- Modeling Time with Number Lines
  • Constructing a Timeline as a number line with larger numbers
  • Distance and Absolute Value
Day 3- Acting Out Addition of Integers
  • Addition of Positive and Negative Integers using the number line
  • The Car Model
Day 4- Acting out Subtraction of Integers
  • Subtraction of Positive and Negative Integers using the number line
  • The Car Model
Day 5- Using our Rules on Large Numbers
  • Adding and Subtracting Larger Numbers
  • Review of concepts covered during the week

Chapter 2: Modeling Problems Algebraically
Day 6- Variables and Expressions
  • Define Variable
  • Create Expressions
  • Model Word Problems with Equations
Day 7- Solving Equations
  • Model Equations with a Balance Scale
  • Use the Subtraction Property
  • Use the Addition Property
Day 8- Graphing on a Coordinate Plane
  • Graph Ordered Pairs
  • Set Up Equations with Two Variables
  • Graph a Straight Line
  • Cost and Sales Applications Using Straight Lines
Day 9- Applications of Line Equations
  • Develop and Graph the Cost Line Equation
  • Develop and Graph the Revenue Line Equation
  • Find the Break-even Point
Day 10- Area and Perimeter
  • Find the Areas and Perimeters of Rectangles and Triangles
  • Relate Two Quantities to Get a Third Quantity
  • Find areas of Triangles

* This is a general outline for the camp. Teachers try to adhere to this but may alter their schedule based on the pace and abilities of the class.