**Algebra – Unit 2 Plan**

**VARIABLES**

**Big Ideas**

**This unit will focus on the use of variables in algebra (such as *x* and *y).* You will use “algebra tiles” to explore how and where to use variables. A special focus will be placed on the meaning of “minus” and how to make “zero.” This topic lays the foundation for simplifying expressions and solving equations; it will be revisited and built upon repeatedly throughout this course.**

**In this chapter, you will learn:**

**Ø What a variable is.**

**Ø How to write and simplify algebraic expressions.**

**Ø How to compare two complicated algebraic expressions**

**Ø How to solve for a variable if you know that two expressions are equal.**

**Ø How to solve problems involving proportional relationships.**

**DAY 1: 9/25 Black Day / 9/26 White Day**

**Objectives**

**Ø Name each algebra tile by area and use them to combine like terms.**

**Ø Differentiate between the area and the perimeter of the tiles. Express perimeter in simplest form.**

**Agenda**

**1. Review Homework.**

**2. Section 2.1.1, Problems 2-1 thru 2-4**

**3. Section 2.1.2, Problems 2-12 to 2-14 and Bonus 2-15**

**Homework**

**2-8, 2-9, 2-10, 2-17 and 2-21**

**DAY 2: 9/27 Black Day / 9/30 White Day**

**Objectives**

**Ø Represent negatives with algebra tiles and interpret “minus.”**

**Agenda**

**1. Review Homework**

**2. MiniQuiz 2.1**

**3. Section 2.1.3, Problems 2-22 thru 2-26**

**Homework**

**2-29, 2-30, 2-32, 2-33**

**DAY 3 10/1 Black Day / 10/2 White Day**

**Objectives**

**Ø Deepen your understanding of the concept of zero and learn how to represent zero multiple ways.**

**Ø Build, simplify and compare algebraic expressions using tiles and comparison mat.**

**Agenda**

**1. Review Homework**

**2. Section 2.1.4, Problems 2-34 thru 2-39**

**3. Section 2.1.5, Problems 47 - 50**

**Homework**

**2-42, 2-44, 2-45, 2-46 and 2-56**

**DAY 4 10/3 Black Day / 10/4 White Day**

**Objectives**

**Ø Practice simplifying algebraic expressions using algebra tiles and us an expression comparison mat to determine which of two expressions is greater.**

**Agenda**

**1. Review Homework**

**2. Mini-Quiz 2.2**

**3. Finish Section 2.1.5**

**4. Section 2.1.6, Problems 2-57(a – d) and 2-58**

**Homework**

**2-52, 2-53, 2-54, 2-59, 2-61**

**DAY 5 10/7 Black Day / 10/8 White Day**

**Objectives**

**Ø Learn to record work in order to show solution steps.**

**Ø Solve equations for *x*.**

**Agenda**

**1. Review Homework**

**2. Section 2.1.7, Problems 2-64 thru 2-67(a and c)**

**3. Section 2.1.8, Problems 2-73 thru 2-76(a and b)**

**Homework**

 **2-68, 2-69, 2-71, 2-72, 2-77**

**DAY 6 10/9 Black Day / 10/10 White Day**

**Objectives**

**Ø Solve equations for *x* and begin to consider special types of solutions, such as “all numbers” and “no solution.”**

**Ø Strengthen simplification and recording skills.**

**Agenda**

**1. Review Homework**

**2. Mini-Quiz 2.3**

**3. Finish Section 2.1.8**

**4. Section 2.1.9, Problems 2-82 thru 2-84(a and b)**

**Homework**

 **2-79, 2-81, 2-86, 2-90**

**DAY 7 10/11 Black Day / 10/15 White Day**

**Objectives**

**Ø Reflect on what you have learned and prepare for Unit Test**

**Agenda**

**1. Review Homework**

**2. Closure Activities**

**Homework**

 **Supplemental Review Worksheet**

**DAY 8 10/16 Black Day / 10/17 White Day**

**Objectives**

**Ø Work together to ACE the team test!**

**Ø Preview Unit 3**

**Agenda**

**1. Review Homework**

**2. Team Test Unit 2**

**3. Section 3.1.1,**

**Homework**

 **CL 2-117 thru CL 2-126**

**Individual Unit 2 Test. 10/18 Black Day / 10/21 White Day**