

The following syllabus describes the lessons and the activities that can be expected for each chapter. Please note that the activities and/or the timing of the activities are subject to change. Activities and projects may also be added to this syllabus. Expect workbook pages and unit tests for assessments. Occasionally students will be required to complete review problems in the textbook.

Throughout the year, students will complete pages in their Simple Solutions books. Expect Simple Solutions quizzes about every two weeks. Also, problem-solving strategies will be introduced in every chapter.

In all chapters, students will be utilizing the IXL website for skill practice. Students will be given a password to log on to [www.ixl.com](http://www.ixl.com). Please ask your child what sections have been assigned. Students will receive extra credit for IXL work done at home.

### **Passport to Mathematics**

#### **Ch 2 Place Value Systems and Operations**

Classroom activities include board work and partner work with the even numbered problems in the workbook pages. Once the students understand the concepts, they will be required to do the odd numbered problems for a grade during class time or for homework.

We will review the old mnemonic device, Please Excuse My Dear Aunt Sally, and make use of the distributive property. Please take some time to ask your student who Aunt Sally is!

#### **Ch 3 Decimals and Percents**

**Students will:**

- write decimals in expanded notation
- measure length in metrics and convert between units (Big Mac, Small Drink!)

- **represent decimals in number line models and set models**
- **rewrite decimals as fractions and percents**
- **compare and order decimals**
- **round decimals**
- **use exponents to write powers and evaluate expressions with exponents**
- **solve problems using decimals, fractions, & percents**

**We will explore the chapter using a similar method as described for chapter 2. In addition, we will make use of Internet offerings and other hands-on activities.**

#### **Ch 4 Applications of Decimals & Percents**

**Students will:**

- **add & subtract decimals utilizing the lining up of place values and the appropriate techniques for ‘borrowing’**
- **estimate answers using front-end with adjustment and rounding**
- **multiply and divide decimals with correct placement of the decimal point**
- **use concept of ‘power of ten’ to move the decimal point**
- **solve word problems using ‘percent of’; solve problems using a bar graph**

#### **Ch 6, 7, 8 Fractions**

**Students will:**

- **calculate common denominators, least common multiples, greatest common factors, and least common denominators**
- **memorize and recall US customary units,**
- **convert units from large to small and vice versa**
- **order fractions**
- **add, subtract, multiply, divide fractions**

**Students will enjoy playing Fraction Sudoku with their peers. Repeated**

**practice at the board, with partners, and with individual worksheets will reinforce the concepts.**

### **Ch 11 Integers (to mid ch)**

**Students will:**

- **describe real life instances of negative numbers**
- **order integers**
- **add positive and negative integers**

**Many websites will be available to assist the students as they explore this new concept.**

### **Ch 9 Geometry and Patterns**

**Students will:**

- **describe and identify geometric figures**
- **identify and label points, lines, & line segments**
- **identify types of angles, using a protractor to measure; label ray, angle, vertex, side**
- **classify angles according to acute, right, obtuse**
- **identify congruence & similarity, using properties to solve for unknowns**
- **utilize concept of symmetry**
- **plot and move points in a coordinate plane**
- **classify triangle according to equilateral, isosceles, scalene, acute, or obtuse**
- **solve for an unknown measure of an angle in a triangle given the other two angle measures**

**This chapter is made enjoyable by discovering these concepts in a group setting. Again, much use of whole class demonstration, software packages, and the internet will vary the types of instruction to appeal to different learning styles.**

### **Ch 10 Geometry & Measurement**

**Students will:**

- **classify supplementary & complimentary angles**
- **calculate triangle area**

- **calculate circumference and area of a circle**
- **calculate surface area and volume of a rectangular prism**
- **use all above concepts to solve word problems and solve for unknowns**

**This is an ambitious schedule! Students should make use of recess drill sessions with Mrs. Whiteley, online support, and suggested internet sites, specifically, [www.ixl.com](http://www.ixl.com). The most important contributing factor to success is to always ASK QUESTIONS! Every student should exercise his/her right to learn!**

**Larson, R., Boswell, L., Kanold, T., Stiff, L. Passport to Mathematics. McDougal Littell: Evanston, IL, 1999.**

**McGraw, N. Simple Solutions Intermediate B. Bright Idea Press: Cleveland, 2008.**