**Course Outline**

**Mathematics 6**

**There are 4 strands within the mathematics curriculum:**

**Number:**

Students will solve problems involving whole numbers and decimal numbers. Students will demonstrate an understanding of ratio as well as percent.

**Shape and Space:**

Students will develop and apply formulas for determining perimeter, area and volume. Students will also construct and compare triangles as well as perform transformations on a single 2-D shape.

**Patterns and Relations:**

Students will represent and describe patterns and relationships using graphs and tables. Students will also express problems as an equation in which a variable is used to represent the unknown.

**Statistics and Probability:**

Students will use appropriate methods for collecting data and will demonstrate an understanding of probability.

**The four strands of the mathematics curriculum general outcomes are broken down into 8 different units within the textbook:**

**Unit 1:** Patterns and Equations- Students discover number patterns, and then use these patterns (rules) to continue the sequence or solve the unknowns within the number sequence.

**Unit 2:** Understanding Number – Students will discover multiples, prime and composite numbers, order of operations and integers.

**Unit 3:** Decimals – Students will be multiplying and dividing decimals by a whole number.

**Unit 4:** Angles and Polygons – Students will be naming, exploring, measuring and drawing angles.

**Unit 5:** Fractions, Ratio and Percent – Students will be converting mixed and improper fractions, exploring ratios and percents, and relating fractions, decimals and percents.

**Unit 6:** Geometry and Measurement – Students will be exploring Triangles and polygons, as well as finding the area of rectangles and perimeter of polygons.

**Unit 7:** Data analysis and probability – students will be conducting experiments, interpreting and drawing graphs, as well as theoretical and experimental probability.

**Unit 8:** Transformations – Students will be using coordinate grids to draw shapes and perform transformations. They will also be learning about successive and combining transformations.

**Evaluation:**

Marks will be given for the completion of worksheets in each unit (assignment mark), quizzes and unit tests.

The questions in the textbook and use of manipulative will be used as a formative assessment.

**Marks Breakdown:**

 35% ……. Number Sense

 20% ……. Shape and Space

 15% ……. Patterns and Relations

 10% ……. Statistics and Probability

 20% ……. PAT

**Materials:**

Pearsons Math Makes Sense 6 Textbook

Manipulatives

Various supplementary books

All marks will be cumulative.

**For more information about the Grade 6 Math Curriculum, you can go online at:**

[**http://www.education.alberta.ca/media/445763/pub5.pdf**](http://www.education.alberta.ca/media/445763/pub5.pdf)