## Course Description

## Sixth Grade

## Mathematics

Philosophy Statement: In mathematics God has blessed His creation with the ability to count, tell time, and make change. This is not an accident; it is a reflection of God's goodness. As students learn to appreciate God's gift of numbers and use addition, subtraction, multiplication and division they should concurrently develop a heart of praise and thanksgiving in their study of mathematics. In mathematics the student will see the order and truth that God has created. Just as the bible says "precept upon precept, line upon line... (Isaiah 28:10) students will build concept upon concept in mathematics.

Course Objective: The students will receive instruction in and demonstrate an understanding of basic mathematical functions and problem solving strategies involving the areas of addition, subtraction, multiplication, and division of whole numbers, decimals, fractions, integers, ratios and proportion, and geometry.

## Textbook: Math 6 (ACSI)

## Materials:

Student textbooks
Jumpstarters for Math (Mark Twain Media, Inc.)
Practice and enrichment worsheets
Manipulative materials
Calculators
Time Allotment: 50 minute classes, 5 days per week

## Course Content:

Place value to billions and hundred thousandths
Addition and subtraction of whole numbers to billions
Additions and subtraction of decimals to hundred thousandths
Addition and subtraction of fractions and mixed numbers
Multiplication and division of whole numbers to billions
Multiplication and division of decimals to hundred thousandths
Multiplication and division of fractions and mixed numbers

Customary and metric measurement
Addition, subtraction, multiplication, and division with integers
Ratio, Proportion, and Percent
Geometry: Plane and Three Dimensional Figures
Geometry: Perimeter, Area and Volume
Statistics, Graphing and Probability
Time and Money consumer applications

## Areas to be Evaluated:

- Class participation
- Homework assignments
- Tests and quizzes
- Group activities
- Projects


## Additional Activities:

- Projects for geometry, statistics and probability, and graphing will be assigned throughout the year to complement the course of study and to make a practical application of mathematical concepts.
- Exceptional students will be asked to participate in Math Olympics, a judged interscholastic ACSI event for reasoning and computation skills.
- Struggling students and students desiring additional help will be invited to lunchtime tutoring sessions.


## Course Description

## Seventh Grade

## Mathematics

Philosophy Statement: In mathematics God has blessed His creation with the ability to count, tell time, and make change. This is not an accident; it is a reflection of God's goodness. As students learn to appreciate God's gift of numbers and use addition, subtraction, multiplication and division they should concurrently develop a heart of praise and thanksgiving in their study of mathematics. In mathematics the student will see the order and truth that God has created. Just as the bible says "precept upon precept, line upon line... (Isaiah 28:10) students will build concept upon concept in mathematics.

Course Objective: The students will receive instruction in and demonstrate an understanding of basic mathematical functions and problems solving strategies involving the areas of addition, subtraction, multiplication, and division of whole numbers, decimals, fractions, integers, ratios and proportion, and geometry.

Textbook: Mathematics A (ACSI) Intermediate Course

## Materials:

Student textbooks
Jumpstarters for Math (Mark Twain Media, Inc.)
Practice and enrichment worksheets
Manipulative materials
Calculators
Time Allotment: 50 minute classes, 5 days per week

## Course Content:

Place value to billions and hundred thousandths
Addition and subtraction of whole numbers, decimals and fractions
Multiplication and division of whole numbers, decimals and fractions
Customary and metric measurement
Ratio, Proportion and Percent
Geometry: Plane and Three Dimensional figures
Geometry: Simple constructions

Geometry: Perimeter, Area, and Volume
Statistics, Graphing and Probability
Solving Equations and Inequalities
Addition, Subtraction, Multiplication, and Division with Integers

## Areas to be Evaluated:

- Class participation
- Homework assignments
- Tests and quizzes
- Group activities
- Projects


## Additional Activities:

- Projects for geometry, statistics and probability, and graphing will be assigned throughout the year to complement the course of study and to make a practical application of mathematical concepts.
- Exceptional students will be asked to participate in Math Olympics, a judged interscholastic ACSI event of reasoning and computation skills.
- Struggling students and students desiring additional help will be invited to lunchtime tutoring sessions.


## Course Description

## Eighth Grade

## Pre-Algebra

Philosophy Statement: In mathematics God has blessed His creation with the ability to count, tell time, and make change. This is not an accident; it is a reflection of God's goodness. As students learn to appreciate God's gift of numbers and use addition, subtraction, multiplication and division they should concurrently develop a heart of praise and thanksgiving in their study of mathematics. In mathematics the student will see the order and truth that God has created. Just as the bible says "precept upon precept, line upon line... (Isaiah 28:10) students will build concept upon concept in mathematics.

Course Objective: The students will receive instruction in and demonstrate an understanding of fundamental elements using expressions, equations, inequalities, integers, geometry, statistics, and graphing to solve math problems

## Textbook: Pre-Algebra for Christian Schools (Bob Jones University Press)

## Materials:

Student textbooks
Jumpstarters for Pre-Algebra (Mark Twain Media, Inc)
Practice and enrichment worksheets
Geometric and algebraic manipulatives
Calculators
Time Allotment: 50 minute daily classes, 5 days per week

## Course Content:

Expressions and Equations (adding, subtracting, multiplying, and dividing)
Decimals - (Place Value, adding, subtracting, multiplying, and dividing)
Metric System
Integers and Rational Numbers (adding, subtracting, multiplying and dividing)
Equations and Inequalities
Ratios, Proportions, and Percent
Geometry: Basic Figures, Perimeter, Area, and Volume, Special Triangles
Statistics and Probability

Square Roots
Graphing and Functions

## Areas to be evaluated:

- Class participation
- Homework assignments
- Tests and quizzes
- Group activities
- Project


## Additional Activities:

- Projects for geometry, statistics and probability, and graphing will be assigned throughout the year to complement the course of study and to make a practical application of mathematical concepts.
- Exceptional students will be asked to participate in Math Olympics, a judged interscholastic ACSI event for reasoning and computation skills.
- Struggling students and students desiring additional help will be invited to before lunchtime tutoring sessions.


## COURSE DESCRIPTION <br> EIGHTH GRADE ALGEBRA 1

Philosophy Statement: In mathematics God has blessed His creation with the ability to count, tell time and make change. This is not an accident; it is a reflection of God's goodness. As students learnt to appreciate God's gift of umbers and use of addition, subtraction, multiplication, and division, they should concurrently develop a heart of praise and thanksgiving in their study of mathematics. In mathematics the student will see the order and truth God created. Just as the Bible says "precept upon precept, line upon line..."(Isaiah 28:1), students will build concept upon concept in mathematics.

Course Objective: The students will receive instruction in and demonstrate the ability to perform functions and problem solving in the areas of real numbers, integers, equations and inequalities, polynomials, radicals, quadratic equations, and rational expressions and equations.

Textbook: Algebra I for Christian Schools (Bob Jones University Press)

## Materials:

Student textbooks
EOC Coach Workbooks
Practice and enrichment worksheets
Algebraic manipulatives
Graphing calculators
Time Allotment: 50 minute daily classes, 5 days per week

## Course Content:

Integers: with operations and exponents
Operations with Real Numbers
Order of operations with Real Numbers
Simplifying algebraic expressions
Solving equations and inequalities
Relations, Functions, and Graphs
Systems of Equations and Inequalities
Polynomials: Operations and Factoring
Radicals: Operations and Pythagorean Theorem
Quadratic Equations and Functions
Rations Expressions and Equations

## Areas to Be Evaluated:

* Class participation
* Homework assignments
* Test and quizzes
* Group activities
* Projects
* EOC State Test in May

Additional Activities:
*Projects for geometry, statistics and probability, and graphing will be assigned throughout the year to complement the course of study and to make a practical application of mathematical concepts.
*Exceptional students will be asked to participate in Math Olympics, a judged interscholastic ACSI event for reasoning and computation skills.
*Struggling students and students desiring additional help will be invited to lunchtime tutoring sessions.

