

7th Grade Math

Textbook: Mathematics Applications and Concepts, Course 2, Glencoe McGraw Hill, Columbus, Ohio, Copyright, 2004.

Course Description: This is a year course that covers adding, subtracting, multiplying, and dividing of real numbers; creating graphs; statistics and matrices; simplifying algebraic expressions; solving equations; ratios and proportions; percent; geometry and measurement; and introductory probability based on the standards developed by the National Council of Teachers of Mathematics (NCTM).

Standards and Benchmarks

Standard A: Number and Operation

Understands meanings of operations and how they relate to one another.

- Apply order of operations rules to simplify algebraic expressions.
- Recognize the difference between prime and composite numbers.
- Apply all divisibility rules to simplify rational numbers.
- Simplify computations with whole numbers, fractions, and decimals using associative, commutative, and distributive properties.

Understands and computes fractions.

- Compare and order fractions with unlike denominators
- Represent fractions with models.
- Compute products and quotients with fractions.

Standard B: Data analysis and Probability

Understands and demonstrates inferences and predictions that are based on data.

- Develop questions about a given set of data.
- Plot data on an appropriate graph.
- Make conjectures about the relationships between sets of data.

Demonstrate an understanding of measures of central tendency.

- Find the mean, median, mode, and range of a set of data.
- Recognize how a new data item will affect measures of central tendency.

Understands that probability can be represented as a fraction

- Recognize all probabilities range from zero to one.
- Identify the parts of a probability fraction

Standard C: Measurement

Understands conversions and ratios between units in a system.

- Convert measurements between kilo-, centi-, milli-, deci-, and the base units for meters, grams, and liters.
- Convert measurements between fluid ounces, cups, pints, and quarts, and gallons, inches, feet, yards, and miles; ounces, pounds, and tons.
- Convert measurements between seconds, minutes, hours, days, weeks, months, and years.

Uses appropriate units of measure when solving problems (2).

- Find perimeter of polygons.
- Find areas of parallelograms and triangles.
- Find the volume of rectangular and triangular prisms.
- Find circumference and area of circles.
- Identify formulas for finding areas of triangles, quadrilaterals, and circles.
- Identify formulas for finding the perimeter of polygons.
- Identify the formula for finding the circumference of circles.
- Identify the formula for finding the volume of rectangular prisms.
- Measure angles.

Standard D: Algebra

Demonstrate the ability to solve one-step whole number number equations.

- Solve addition and subtraction equations using inverse operations.
- Solve multiplication and division equations using inverse operations.

Understand the coordinate plane

- Identify a given point using an ordered pair.
- Graph a given point on a coordinate plane.

Standard E: Geometry

Understands coordinate geometry.

- Draw parallelograms and triangles on a coordinate plane.

Understands relationships among types of two-dimensional objects using their defining properties.

- Compare and contrast the properties of quadrilaterals and various types of triangles.
- Classify angles based on angle measure.

Grading Scale:	A	93-100
	B	83-92
	C	73-82
	D	63-72
	F	Below 63

Supplies:

3 ring binder to be used for a Math notebook
Paper to do assignments
Pen
Pencils and eraser(s)
Compass (when needed)
Protractor (when needed)
Ruler (with both inch and centimeter markings- when needed)
Planner- supplied by the school
Graph paper- should get some of your own
Scientific calculator that has a fraction key

Quiz scores are weighted 40%, Tests are weighted 35%, and daily grades are weighted 25%.

Absences

If you are absent, it is your responsibility to find out what you missed and to get your assignments. As stated in the student handbook, you have as many days for makeup as you missed. Pre-excused – You will be required to get your assignments before you are gone.

Work missed due to an unexcused absence will be recorded as a "0".

Cheating will not be tolerated. Anyone caught cheating will receive a "0" for the assignment/test and will also be punished depending on the severity of the issue.

Classroom Rules and Expectations

- Follow directions the first time they are given.
- **Be prepared for class!** Bring everything with you that you need every day unless otherwise told.
- Pay attention in class.
- Respect others and their property. (Don't tear up someone else's paper, knock their books off their desk, etc.)
- Raise your hand and be recognized before speaking in class.
- Do all of your Math assignments in pencil. Assignments done in ink will be docked at least 20%.