## LIBERTY LIBERAL ARTS ACADEMY Elementary Math 3<sup>rd</sup> & 4<sup>th</sup> Multiplication & Division of Single and Multiple Digits

Teacher: Mrs. Lopez

Grade Levels: 3<sup>rd</sup> & 4<sup>th</sup>

Prerequisite: Students must be able to add and subtract single and multiple digits

Teacher Compensation: \$270 annually payable in 9 monthly payments of \$30

**Semester Supply Fees**: \$30 due each semester. Fall Semester fee is due 1<sup>st</sup> week of July to secure Student's place in class or on Orientation day. Spring Semester fee is due in January.

Curriculum: Teacher will supply all texts and workbooks

Student Supplies Needed: Notebook, pens, and pencils

**Class Description**: Multiplication for single and multiple-digit numbers and other topics.

## Major Concepts and Skills Include:

Using strategies based on place value and properties of operations to multiply Fluently multiplying any combination of whole numbers Solving for an unknown factor Solving abstract and real-world problems involving addition, subtraction, and multiplication Measuring and computing area Relating concepts of area to addition and multiplication **Additional Concepts and Skills:** Skip counting as a precursor to multiplication Adding and subtracting time in hours and minutes Multiplying, adding, and subtracting U.S. currency and standard units of measure Representing, recording, and interpreting data Understanding of basic fractions

Estimating and solving measurement problems

**Division for single and multiple-digit numbers and other topics.** Division is presented as the inverse of multiplication. Single-digit division facts are learned, and the concepts of division and place value are applied when solving long division problems.

## Major Concepts and Skills Include:

Using strategies based on place value and properties of operations to divide Understanding division as solving for an unknown factor Fluently dividing any combination of whole numbers Solving abstract and real-world problems involving all four operations Interpreting remainders in short and long division Understanding fraction notation in light of division **Additional Concepts and Skills:** Reading and writing Roman numerals Dividing, multiplying, adding, and subtracting U.S. currency and standard units of measure Understanding angle measure and geometric shapes including points, segments, rays, and lines Classifying shapes based on defining attributes

Understanding and computing area and volume