

MAT0300_202338_Staging_EMBR_TEM

MAT-300

2023 05/01/2023 to 04/30/2024 Modified 03/22/2023

Course Description

This math course provides students exceptional opportunities to make real biblical worldview connections to math through engaging and exciting lessons, materials, and activities. The math course utilizes a biblical theme in each math module that helps the students review their prior knowledge and build a solid foundation for continued future knowledge. An end-of-the-course math review and interactive practice allow the students to utilize their acquired math skills through an innovative process that will encourage and excite each student's interest in math.

Rationale

This course utilizes prior math knowledge and expands it with new math skills and techniques, which will greatly assist the student in current and future educational endeavors.

Course Learning Outcomes

- A. The student will identify and understand the process of addition and subtraction.
- B. The student will identify and understand standard, expanded, and word form.
- C. The student will identify and understand place value and ordering numbers.
- D. The student will identify and understand money.
- E. The student will identify and understand time.
- F. The student will identify and understand the steps in solving money and time word problems.
- G. The student will understand the importance of collecting and analyzing data.
- H. The student will identify and understand different types of graphs.
- I. The student will identify and understand fractions.
- J. The student will identify and understand fraction comparison and equivalent fractions.
- K. The student will identify and understand mixed numbers and improper fractions.
- L. The student will identify and understand different components with geometry.
- M. The student will identify and understand probability, rounding, and estimation.
- N. The student will identify, understand, and master multiplication fact families 1-10.
- O. The student will solve single and multi-step word problems.
- P. The student will understand how to check division problems with the process of multiplication.

Biblical Integration Outcomes

A. The student will understand that God has a purpose and plan for our lives.

B. The student will understand the importance to work hard at everything.

Course Resources

See Ember's [Systems Requirements](#) for computer specifications necessary to operate this curriculum.

- Note: Embedded YouTube videos may be utilized to supplement Ember's YouTube videos are the property of the respective content creator, licensed to YouTube for distribution and user access. As a non-profit educational institution, Ember is able to use YouTube video content under the YouTube Terms of Service. For additional information on copyright, please contact the [Jerry Falwell Library](#)

* Course Policies

Types of Assessments

To simplify and clearly identify which policies apply to which assessment, each assessment has been categorized into one of four categories: Lesson, Assignment, Quiz, or Test. Each applicable item on the course Modules page has been designated with an identifier chosen from among these categories. Thus, a Quiz on the American Revolution may be designated by the title, "1.2.W Quiz: The American Revolution."

- **Lesson:** *Any item on the Modules page designated as a "Lesson"*

These include instructional content and sometimes an assessment of that content. Typically, a Lesson will be the day-to-day work that a student completes.

- **Assignment:** *Any item on the Modules page designated as an "Assignment"*

Typical examples of Assignments include, but are not limited to, papers, book reports, projects, labs, and speeches. Assignments are usually something that the student should do his or her best work on the first time.

- **Quiz:** *Any item on the Modules page designated as a "Quiz"*

This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Quizzes cover a smaller amount of material than Tests.

- **Test:** *Any item on the Modules page designated as a "Test"*

This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Tests cover a larger amount of material than Quizzes.

Materials Selection Policy

Ember curates educational materials that are consistent with the school's philosophy; however, the fallen human condition depicted in literature (as in Scripture itself) is not always pleasant. Valuable works sometimes have objectionable or profane elements. Good books provide four (4) recognized values.

- They build godly attitudes and character traits.
- They deepen our social and cultural awareness.
- They strengthen our use of written language.
- They provide a lifelong source of enjoyment and relaxation.

In order to instill these values in students and fulfill the stated objectives of the school, all Ember students are expected to read and study good books on a regular basis. Recognizing that materials designed for one level may not be appropriate for another, three (3) levels of criteria are applied:

- Elementary materials must contain no objectionable material,
- Objectionable elements in sixth through eighth-grade materials must be limited and must serve a specific educational

- purpose, and
- Objectable content may be included in high school materials but must be outweighed by positive literary, curricular, and/or Christian values.

The curriculum department has approved required educational materials for students.

Resubmission Policy

Students are expected to submit their best work on the first submission for every Lesson, Assignment, Quiz, and Test. However, resubmissions may be permitted in the following circumstances:

- **Lesson:** Students are automatically permitted two attempts on a lesson. Students may freely resubmit for their first two attempts without the need for teacher approval.

If a student feels that he or she deserves a resubmission on a Lesson, Assignment, Quiz, or Test due to a technical issue such as a computer malfunction, the student should message his or her teacher to make the request. With Ember, the teacher may be a physical school teacher or the student's parent/guardian. The teacher can give another attempt from his or her Canvas account. For more information on how to do this, please review the Ember orientation course.

Schedule

Module 1: Numbers

- Week 1: Number Models
- Week 2: Writing Numbers
- Week 3: Comparing and Ordering Numbers
- Week 4: Rounding Numbers

Module 2: Addition & Subtraction

- Week 5: Addition and Subtraction
- Week 6: Mental Math Strategies
- Week 7: Traditional Algorithms
- Week 8: Word Problems
- Week 9: First Quarter Review

Module 3: Time & Money

- Week 10: Telling Time
- Week 11: Elapsed Time
- Week 12: Money

Module 4: Measurement

- Week 13: Length
- Week 14: Temperature
- Week 15: Volume

Module 5: Multiplication & Division

- Week 16: Multiplication and Division Strategies
- Week 17: Multiplication and Division Models
- Week 18: Quarter Two Review Week

Module 6: Double-Digit Multiplication

- Week 19: Estimation
- Week 20: Multiplying by Two-Digit Numbers
- Week 21: Word Problems

Module 7: Fractions

- Week 22: Fraction Models
- Week 23: Equivalent Fractions
- Week 24: Comparing Fractions
- Week 25: Mixed Numbers and Improper Fractions
- Week 26: Adding and Subtracting Fractions
- Week 27: Third Quarter Review

Module 8: Data

- Week 28: Probability
- Week 29: Graphing
- Week 30: Patterns
- Week 31: Equivalent Relationships

Module 9: Geometry

- Week 32: Plots, Lines, Segments, and Angles
- Week 33: Polygons
- Week 34: Perimeter and Area
- Week 35: Problem Solving in Real-Life
- Week 36: Fourth Quarter Review