

MAT0200_202338_Staging_EMBR_TEM

MAT-200

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

Course Description

This math course helps students continue to build and strengthen their math skills. Students will learn vital math vocabulary, three-digit whole numbers, and solid geometric figures. Students will continue to learn, use, and gain proficiency in basic addition facts through the tens table and the corresponding subtraction facts. Students will explore U.S. customary and metric units of measure, predict using simple probability, and create and interpret picture and bar graphs. Students will work with problem-solving, patterns, and will practice identifying missing numbers in addition and subtraction facts. The students will continue to deepen their education through these areas with biblical integration throughout the course.

Rationale

This course will develop number sense within each student and prepare the student for higher-level thinking concepts in mathematics. Biblical understanding is woven throughout the curriculum to provide a foundation for understanding the usefulness of mathematics in everyday life. Learning is scaffolded to provide the development of new concepts on solid foundational learning.

Course Learning Outcomes

- A. The student will understand and explore whole number concepts, ordinals, and place value.
- B. The student will understand and explore whole fractions and fraction concepts.
- C. The student will explore and understand algebraic concepts and geometric and numerical patterns.
- D. The student will classify and explore attributes of objects and shapes.
- E. The student will understand, explore, and solve problems involving addition and subtraction.
- F. The student will understand, explore, and solve problems involving multiplication and division.
- G. The student will understand and explore concepts of time and money.
- H. The student will explore and understand measurement in standard and non-standard units.
- I. The student will collect and display data using a variety of methods.

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
- Objectionable 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: Counting and Place Value

- Week 1: Counting and Skip Counting
- Week 2: Tens and Ones
- Week 3: Ones, Tens, and Hundreds
- Week 4: Comparing and Ordering Numbers

Module 2: Introduction to Addition & Subtraction Concepts

- Week 5: 10 and 100 More
- Week 6: 10 and 100 Less
- Week 7: Rounding Numbers
- Week 8: Comparing Numbers
- Week 9: Quarter One Review

Module 3: Addition, Subtraction, & Related Facts

- Week 10: Addition Strategies
- Week 11: More Addition Strategies
- Week 12: Related Facts and Subtraction Strategies
- Week 13: Greater Than, Less Than, Equal To

Module 4: Word Problems & Money

- Week 14: Addition and Subtraction Word Problems
- Week 15: Word Problem Strategies
- Week 16: Pennies, Nickels, and Dimes
- Week 17: Quarters and Dollars
- Week 18: Quarter Two Review

Module 5: Measurement

- Week 19: Length
- Week 20: Weight
- Week 21: Telling Time
- Week 22: Calendars
- Week 23: Temperature

Module 6: Geometry and Fractions

- Week 24: Plane and Solid Figures
- Week 25: Introduction to Fractions
- Week 26: Comparing Fractions
- Week 27: Quarter Three Review

Module 7: Patterns & Equality

- Week 28: Patterns
- Week 29: Equations
- Week 30: Word Problem Review

Module 8: Probability & Graphing

- Week 31: Graphing

- Week 32: Probability

Module 9: Computation Strategies & Everyday Math

- Week 33: Estimating Sums and Differences
- Week 34: Partial Sums and Computation
- Week 35: Using Math in Everyday Life
- Week 36: Quarter Four Review