

Introduction

CLE Sunrise Math is built on the thesis that most children can learn, understand, and master mathematics concepts. It seeks to relate math to everyday life and to make it practical. We believe that mathematics should help students achieve the ultimate goal—loving, serving, and bringing glory to God.

CLE Sunrise Math introduces concepts in incremental steps. This allows the student to master each increment of a skill before advancing to the next step. Thus he does not face entire lessons or chapters on a single concept but meets several simple concepts simultaneously. Each increment easily becomes a part of his “big picture,” not only because it is small but also because it fits with what he has already learned.

The only way a student will retain what he has learned is by consistent, systematic review. CLE Sunrise Math uses a system of continuous review. Instead of having a grand review at the end of the year, a large part of every day’s work is review. The goal is mastery, not just exposure.

Course Materials

Items in italics are available from CLE.

Teacher:

- *Teacher’s Guides for Math 500*
(501-505 and 506-510)
- *Answer Keys for Math 501-505, Math 506-510*
- *Multiplication and Division Flash Cards*

For each student:

- *LightUnits 501-510*
- *Elementary Math Reference Chart* and *Intermediate Math Reference Chart* for each student or small group of students
- Rulers with millimeters, centimeters, meters, inches, feet, and yards
- Protractor for each student (the smallest ones work best)

The LightUnits

Each LightUnit from Math 502-510 features a different part of the world where math is used in everyday life. Page 1 of each LightUnit introduces the LightUnit theme with a story.

Lessons 1-16

1. Title Bars. Each lesson begins with a title bar that directs students to do their daily speed drill or mastery drill.

Speed Drills. Since fact learning is essential for mastery, Sunrise Math includes regular speed drills. Students have one minute to complete as many facts as they can. Then they score their drill and write the score above the drill.

Mastery Drills. Mastery drills include facts that should be memorized. These facts cover basic measurement equivalents in the U.S. and metric systems, geometry facts and calendar facts. These drills need not be timed, but you may time them if you wish for an incentive.

2. Teaching the Lesson New material is introduced at the beginning of each lesson, right after the speed drill or mastery drill reminder. Students should be able to work through most new material on their own with occasional help from the teacher. A large Teacher Check circle indicates that the material is more difficult and that you may need to formally teach that lesson.

Refresher Lessons. This symbol indicates that the concept was originally taught in Math 400.

3. We Remember. This review ensures mastery of previously taught skills and concepts. Students should need little help in this section.

4. Fascinating Discoveries. These occasional enrichment activities expose students to new concepts. There is no review or testing of these activities—they’re *just for fun!*

Lesson 17: Fascinating Discoveries

The last lesson in each LightUnit is designed to broaden the student’s exposure to math. If you need to shorten the school year, skip these lessons.

Quiz 1, Quiz 2, and LightUnit Test

Sunrise Math tests concepts only after they have been reviewed for five days or more. Tests and quizzes are cumulative. Quiz 1 is in Lesson 5, Quiz 2 is in Lesson 10, and the test is Lesson 16 in every LightUnit.

Symbols Used in the LightUnits



Teacher Check. Used before quizzes and tests, and anywhere else the child must obtain the teacher's initials before proceeding.

Teacher Aide Check. Used with exercises that need to be checked by the teacher or teacher's aide. The child may continue working beyond this symbol even if the exercise has not yet been checked.

Optional Activity. The student should check with the teacher as to whether to do exercises marked with a star.



Refresher Lesson. This concept was taught in Math 400 and appears again in Math 500.



1. Story Problem.



We Remember – The daily review section continuously reviews skills and concepts.

... Mental Math – Exercises in which the student works mentally and writes down only the answers.

+ - ÷ × Skill Builders – Mixed computation practice.

Fascinating Discoveries – Optional activities, usually found in Lessons 5, 10, and 17.

Grading a LightUnit

LightUnit Grade. To obtain a final LightUnit grade, average the two quiz grades and any other optional grades. Add this average to the LightUnit Test grade and divide by two. This average will be the final grade for the LightUnit.

Example: Quiz 1 – 96%
Quiz 2 – 98%
Average – 97%
Test score – 93%
Average – 95%
LightUnit score is 95.

Scores Below 80. If a student scores 75-79% on a LightUnit Test, he may review the concepts he is weak in. Verify that he knows the material by quizzing him or giving a remedial assignment.

If a student scores 70-74%, have him restudy for the test and take the Alternate LightUnit Test located in Appendix C.

If a student scores 70% or below, have him do a thorough review of the LightUnit before taking the Alternate LightUnit Test or have him redo the entire LightUnit and then take the Alternate LightUnit Test. For both scenarios, if the student scores between 75-100% on the Alternate LightUnit Test, record the score for the LightUnit as 80%.

If all controls are followed but the student consistently fails to achieve 80%, consider underlying causes. What is the student's natural ability? Can he be expected to achieve 80% or above? These students may need to be evaluated by a trained person or to have one-on-one assistance.

Math Reference Charts

The *Elementary* and *Intermediate Math Reference Charts* are portable, durably laminated glossaries. They are filled with definitions, diagrams, equivalent measures, geometry, common abbreviations, etc. The elementary chart contains a full set of multiplication facts through the 9s. Students can work more independently when they can look up information as needed. The reference chart is a tool that will help them achieve this goal.

The Appendixes

Take time to become familiar with the appendixes in this teacher's guidebook.

Appendix A: Math 400 Skills Index tells you where in Math 400 each skill is introduced.

Appendix B: Math 500 Scope and Sequence gives an overview of the whole course. Many states require homeschoolers to submit a scope and sequence of the course they plan to study.

Appendix C: Alternate LightUnit Tests cover the same concepts as the regular LightUnit Tests, but in a different order. They may be photocopied and used when a student needs to retake a test for any reason.

Appendix D: Math 500 Skills Index tells you where in Math 500 each skill is introduced.

Appendix E: Extra Practice Sheets provide reinforcement for concepts in LightUnit 501.

Appendix F: Math Reference Charts are reproduced here for the teacher's benefit.