

# 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. Mathematics should help students achieve the ultimate goal—serving and bringing glory to God.

CLE Sunrise Math introduces concepts in incremental steps. This allows students 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 math uses continuous review. Instead of having a grand review at the end of the year, much of each day’s work is review. This goal for students is mastery, not only exposure.

## Course Materials

Here is what is needed to teach this course. Items in italics are available from CLE.

### Teacher:

*Teacher’s Guides for LightUnits 201-205 and 206-210*

*Addition/Subtraction Flash Cards*

(See “Flash-Card System” in this introduction)

*Multiplication/Division Flash Cards*

Teaching clock or *Student Clock*

### For each student:

*LightUnits* (10 workbooks numbered 201 through 210)

*1-200 Counting Chart*

Dry-erase marker for the counting chart

## LightUnit Sections

**Introductions.** Each LightUnit in Math 200 has a theme. The introductory page introduces the theme and creates interest for the LightUnit.

**Title Bars.** Each lesson begins with a title bar

enclosing a tidbit of information related to the LightUnit theme.

**Oral Activities.** These activities include daily counting exercises, flash-card practice, and speed drills. Some lessons also have dictation exercises or numbers for the students to read orally.

**New Skills or Concepts.** These are the main teaching parts where new skills and concepts are introduced. The earlier LightUnits include refreshers where skills taught in Grade 1 are re-introduced. A large circle (a Teacher Check symbol) indicates that the teacher should teach the lesson.

**We Remember.** This section is a daily review to ensure mastery of skills and concepts. Students should be able to do this section independently. Be prepared to give help as needed.

**Just for Fun.** Enrichment activities usually appear on quiz and test days. In these, students are merely exposed to new concepts. There will be no review or testing of enrichment activities.

## Teaching a Lesson

Lessons vary, but here is a typical teaching sequence for a lesson in LightUnits 202-210.

**Step 1: Preview the lesson.** Note the title bar. You may have more information that you want to share to add interest. Prepare flash cards and manipulatives. Plan for the oral activities that are included in the lesson. Study “Teaching the Lesson” to get an idea of how to teach the new skills or concepts. You may have ideas for teaching the lesson that will better meet the needs of your students.

**Step 2: Present the lesson.** Have students turn to the new lesson. Discuss the title bar.

Do the oral activities, flash cards, and speed drills. For some lessons you will need to dictate numbers or listen to students read numbers to you.

Move on into the new skills/concepts part of the lesson. Make sure students understand this section before going on. Parts of this section may include refreshers (concepts that were introduced in Grade 1).

**Step 3: Assign the *We Remember* section.** This section continually reviews skills and concepts. Students should usually be able to work on this section independently.

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### Flash-Card System

The Sunrise Math 200 comes with a built-in flash-card system that helps you control when and how often to practice math facts.

CLE Math Flash Cards are double-coded so that the same box of cards may be used for first and second grade. However, they cannot be used for both grades simultaneously. If you are teaching first and second graders, you will need two sets of cards. The cards are pre-sorted for use with first grade. You will need to manually re-sort them for Grade 2. See the instruction card in the box to arrange them in the correct order.

The cards for Math 200 are coded with the letters A through M. In the “Preparing the Lesson” section of the *Teacher’s Guide*, you will be told which cards to practice for that particular lesson. Beginning with LightUnit 202, you will be practicing two groups of cards each day. Spend more time with the cards that were introduced last. For example, when you practice the A cards and G cards, spend more time with the G cards.

Multiplication is introduced in LightUnit 206. The following multiplication tables are introduced in Math 200: 0’s, 1’s, 2’s, 5’s, and 10’s.

### Speed Drills

Since fact learning is essential for mastery in math, Sunrise Math 200 includes daily speed drills. Follow these steps to administer speed drills:

1. Have students turn to the speed drill near the end of the LightUnit. Make sure students know which drill to do.
2. Explain or say the following: “When I say, ‘Ready, begin,’ do as many of the facts as you can in two minutes. Start at the top and work from left to right. If you come to a fact that you do not know, skip that fact. You may come back to it later if you have time. When I say ‘Stop,’ lay your pencil down.”
3. At the end of two minutes, say, “Stop. Put your pencils down.”
4. Check the problems as a class. Have the students put an X by each wrong answer. After checking, have them write the number of correct answers in the box.
5. Check the drills for accuracy as soon as possible. Then have students correct and finish the drill and record their scores on the graph.

### Quizzes and Tests

Sunrise Math tests concepts only after they have been reviewed for five days or more. Tests are cumulative. Each LightUnit, with the exception of 201, has two quizzes and a LightUnit test.

**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.

### Just for Fun

Just for Fun activities are found at the end of some lessons. The students may do them if time permits. You may want to save them for spare-time activities later in the day.

## Teacher Check Symbols

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



**Teacher's Aide Check.** Used anywhere the child may not continue working in the LightUnit until the exercise has been checked and initialed by the teacher's aide or teacher.



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



**Optional Activity.** The student should check with you for instructions as to whether to do exercises marked with a star.



## Symbols in Math LightUnits



Oral counting exercises.



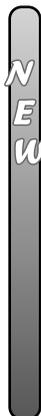
Flash-Card Practice and Speed Drills.



Dictation.



Concepts and skills reviewed from LightUnits 108, 109, and 110.



New concepts and skills.



Calls attention to what students will do in a given set of problems.



Story problems.



New or recently introduced facts.



Optional Activities.



Review of concepts and skills taught.

## Manipulatives

While not required, manipulatives are important tools in teaching new skills and concepts. They help students understand and retain what is taught. Manipulatives, supplies, and pictures needed for each lesson are listed in the LightUnit overviews at the beginning of the teacher's notes for each LightUnit.

## Appendixes

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

**Appendix A: Math 100 Skills Index.** This index tells you where in Math 100 each skill is introduced.

**Appendix B: Math 200 Scope and Sequence.** This gives you an overview of the whole course. Homeschoolers may photocopy this to give to local school boards if they require scopes of what you are teaching in your homeschool.

**Appendix C: Alternate LightUnit Tests.** The Alternate LightUnit Tests cover the same concepts as the regular LightUnit Tests, but in a different order, and often with differing activities. They may be photocopied and used when a student has to retake a test for whatever reason.

**Appendix D: Math 200 Skills Index.** Use this index to find where skills are first taught (or re-taught from first grade) in Math 200.

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### **Appendix E: Math 200 Flash-Card System.**

This section gives you a bird's-eye view of how the Addition/Subtraction Flash Cards are grouped for our flash-card system.

### **Appendix F: Elementary Math Reference Chart.**

The elementary reference chart is reproduced here for the benefit of the teacher.

### **Appendix G: Answers to Math 201 Extra**

**Activity Sheets.** This appendix contains answers for pages 58-64 of Math 201.