

REFERENCE GUIDE: ACCESSING PROJECT SOL MATERIALS



Revised November 21, 2019

Accessing and Using the SOL 2.0 Curriculum on CK12.org

Bienvenidos! Welcome to this introduction to SOL 2.0 and CK-12

This document outlines the basics for understanding how to access SOL 2.0 bilingual, Common Core-aligned college prep math materials. This guide introduces you to the basic structure of the CK-12 platform and to the SOL 2.0 materials. These notes will prepare you with the basics on how to use SOL 2.0 Algebra 1 and Algebra 2 instructional materials with your students.

Materials for both SOL courses (called CLASSES in CK12), which are created and peer-reviewed by SOL 2.0 content specialists, are housed on the [CK-12 online](#) platform. The course materials for both Algebra 1 and Algebra 2 follow the same format and structure. You can use these SOL materials in the form provided, or adapt the lessons given in order to address the specific academic and language needs of your English learner students and/or students in dual immersion courses. Your students will benefit from materials that support their efforts to access academic content in a specific academic language or to acquire a second language using relevant content.

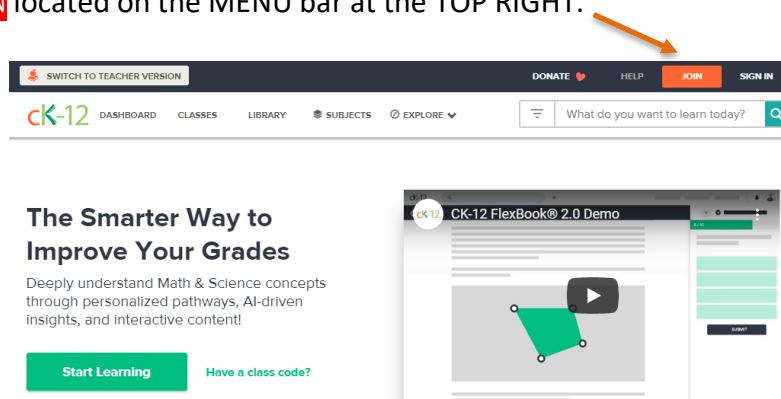
Save this **Reference Guide** to help you find and access our materials the first few times you work on SOL 2.0 lesson planning.

What you will gain from this Reference Guide

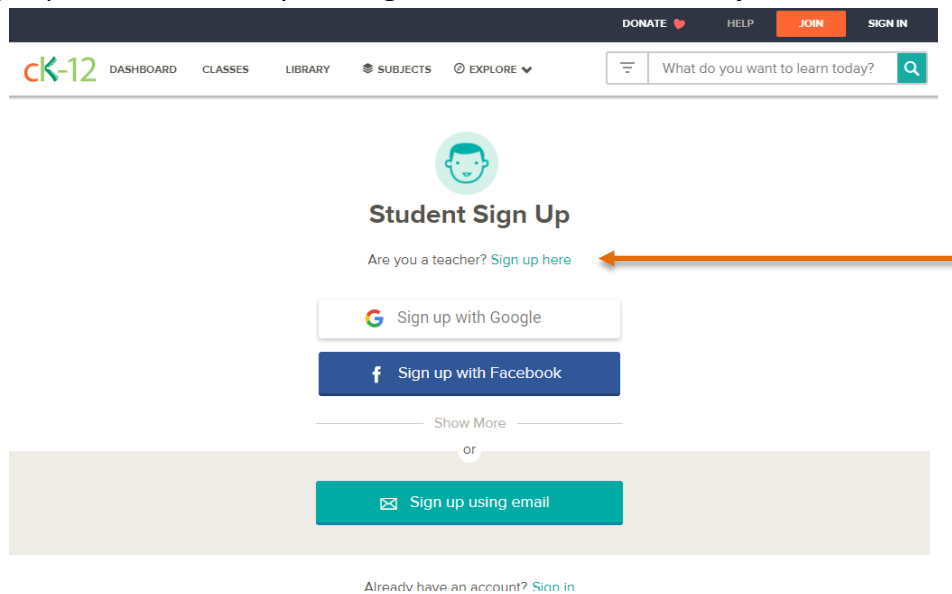
- Understand how to log in and locate the SOL math materials
- Learn what resources are available to you on CK-12.org and via Project SOL
- Be able to utilize SOL math materials with your students

A. Create a CK-12 Account:

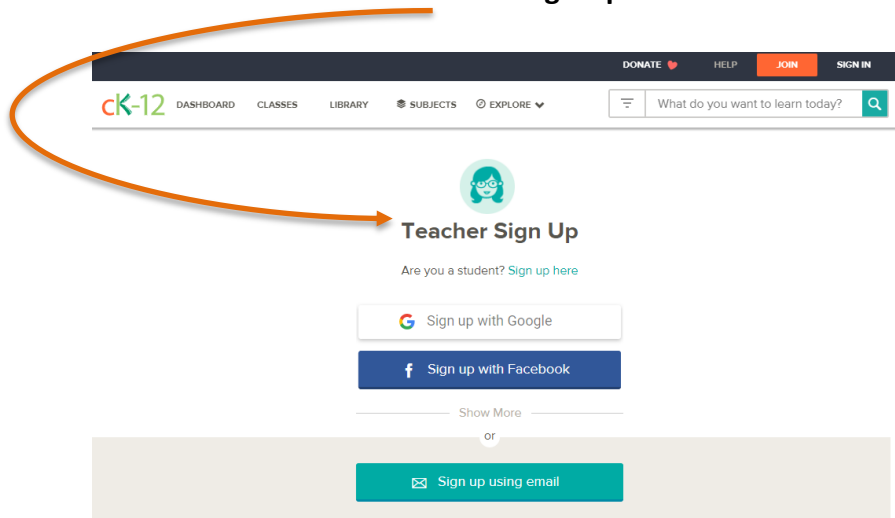
1. Start by going to www.ck12.org
2. Click **JOIN** located on the MENU bar at the TOP RIGHT.



3. Sign up *AS A TEACHER* by clicking on the link next to: “Are you a teacher?”



4. The screen will now shift to the **Teacher Sign Up**.



5. **Enter your name and email** address or sign up using Google.
6. Now follow the prompts to **create your Teacher profile**.
7. In subsequent visits to the website, sign in using the same email address and password you just created, or use your Google, if you have one.

B. Join the SOL Teacher Group:

You have now joined CK12.org. What should you do next to access SOL materials?

1. First, enter the **SOL CLASS CODE** when prompted and gain access to the Project SOL ALGEBRA 1 AND ALGEBRA 2 CLASSES, or **use the direct URL link.**

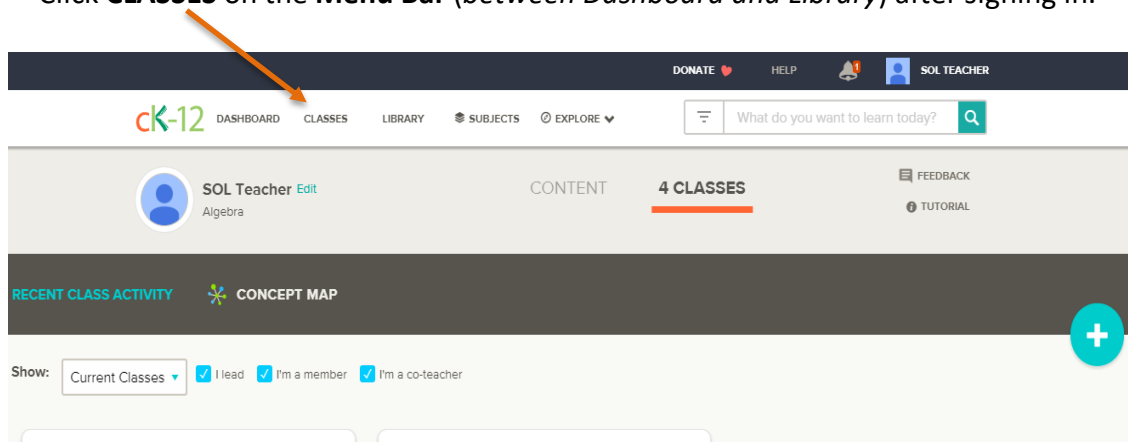
Algebra 1 Class Code: 6d8av

Algebra 1 URL: <https://www.ck12.org/join/group/?accessCode=6d8av>

Algebra 2 Class Code: 83ren

Algebra 2 URL: <https://www.ck12.org/join/group/?accessCode=83ren>

2. Click **CLASSES** on the **Menu Bar** (*between Dashboard and Library*) after signing in.

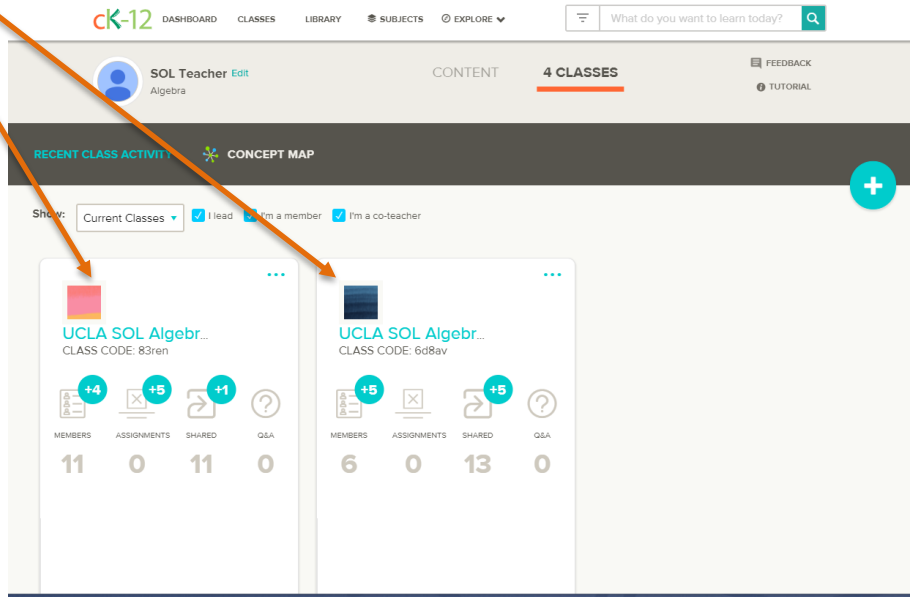


3. **Find and Click the large PLUS SIGN (+)** on the right side.

Two options should pop up: **“CREATE A CLASS”** and **“JOIN A CLASS.”**

4. Select **“JOIN A CLASS”** and enter the **Project SOL group code**. Use **“CREATE A CLASS”** to make a new course/class of your own.
5. The **SOL CLASS** you selected (either Algebra 1 or Algebra 2) will appear (with you as a member).
6. When you sign in subsequently, select **CLASSES** on the **top Menu Bar**.
7. The **SOL CLASSES** should appear (see image on the next page).
8. Email crp@ucla.edu if you need assistance.

SOL CLASSES

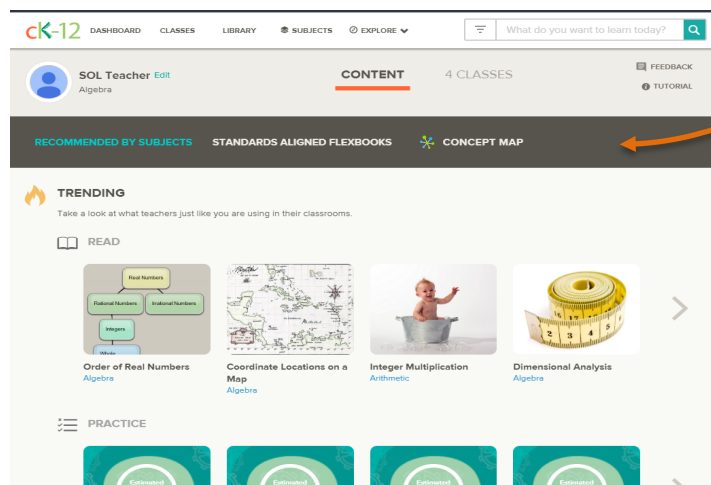


C. Explore the CK-12 Website:

Utilize the **MENU BAR** at the top of the website to access Project SOL and supplemental resources.



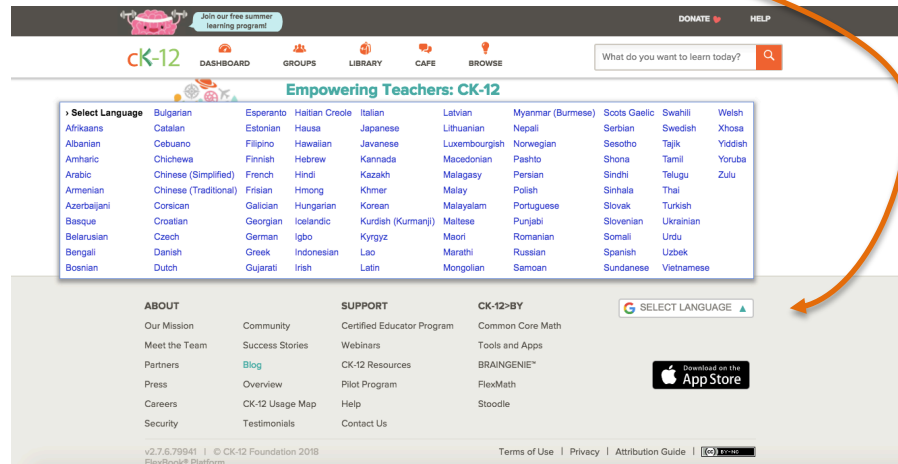
1. **CK-12** leads you to the homepage of the CK-12 website.
2. **DASHBOARD** provides links to CK12 content, SOL CLASSES, and trending materials (interactive PLIX, videos, other). Explore resources located at **Recommended by Subjects**, **Standards Aligned Flexbooks**, and **Concept Map**.



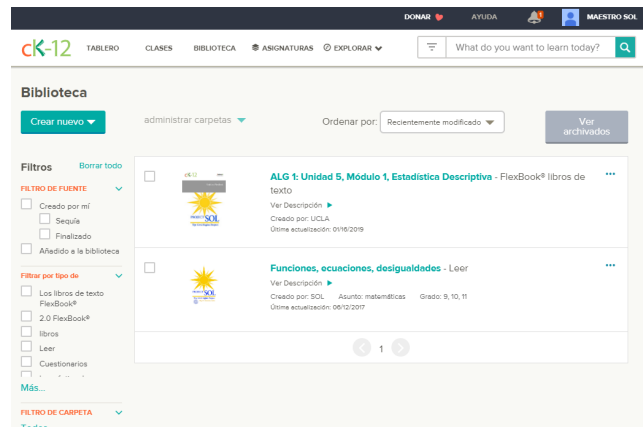
3. **CLASSES** leads teachers *DIRECTLY* to the **Project SOL Algebra Materials**. Every time you log in, use **CLASSES** as a *short cut* to **Project SOL**.
4. **LIBRARY** is an archive of *all content* on CK-12, not just the SOL materials.
5. **EXPLORE** has a wide array of shared resources that supplement the SOL materials, including interactive **PLIX (interactives)**, **Flexbooks**, **Study Guides**, **Adaptive Practice**, etc.

TRANSLATION TOOLS

6. In addition to the many resources on the top MENU Bar, **scroll to the bottom of the page**. The **LANGUAGE TRANSLATION TOOL** allows you to toggle from English to almost 100 languages.

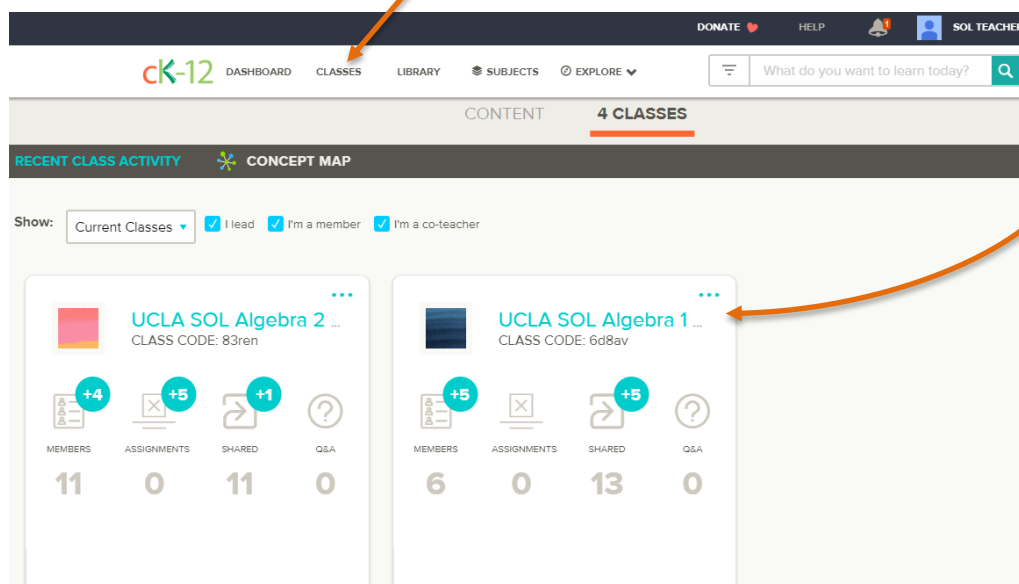


Select **Spanish** and see that the text converts to Spanish. (Switch back to English before moving forward.)



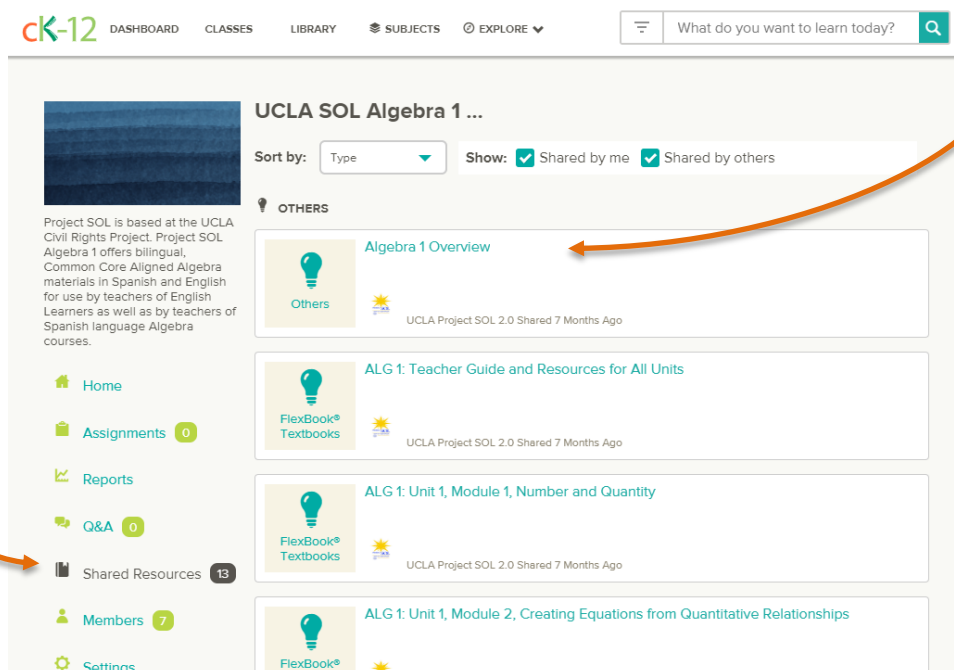
D. Take the Short Cut to the Project SOL Courses

Find Project SOL materials by clicking **CLASSES** on the top **Menu Bar**. Select the **Algebra 1 CLASS**.



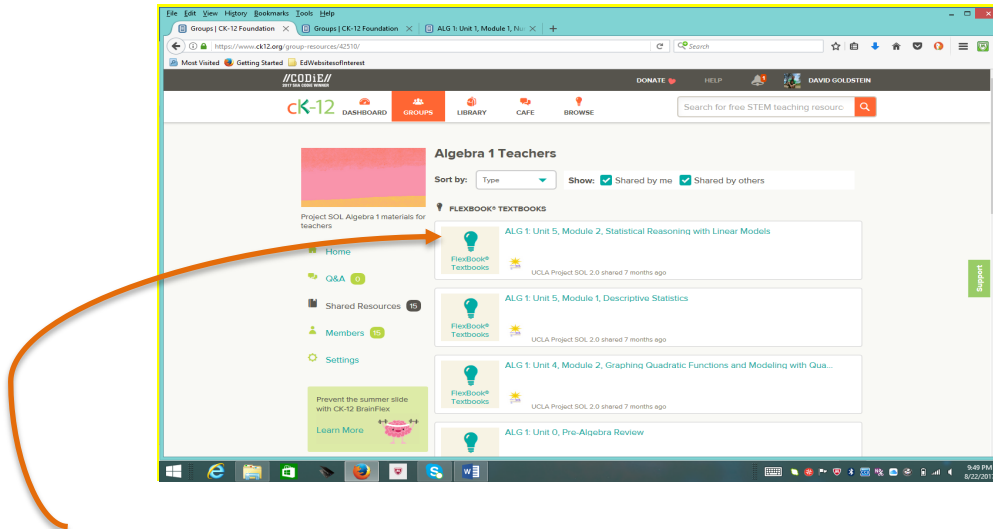
Explore the **Menu items** on the **left side**.

SHARED RESOURCES is the gateway to Project SOL modules and chapters. The **Overview** flexbook in each class is a map or list of the class content.



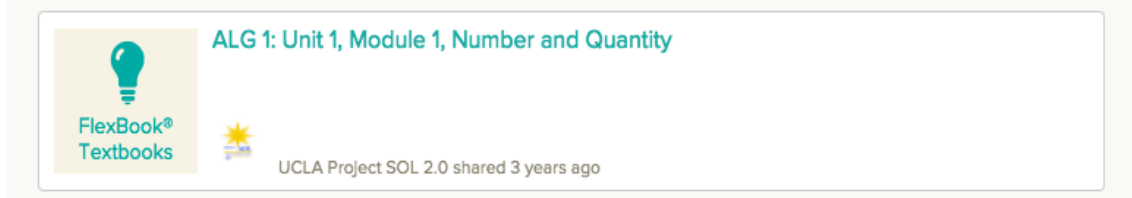
E. Get to Know the SOL Math Materials

SOL materials are organized into **Flexbooks**, which contain the **Chapters/Modules**, **Teaching Guides** and **Additional Resources** that you utilize with your students.

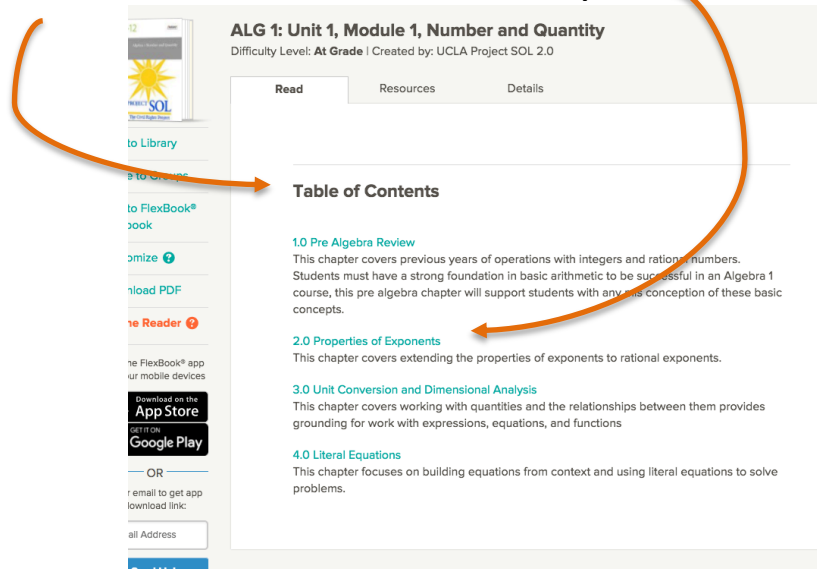


Flexbooks (with **lightbulb icon**) are titled with the Course Number, Unit Number, Module Number (if more than 1 module) and the Unit or Module Title.

Open the **Flexbook** named **ALG 1: Unit 1, Module 1, Number and Quantity** (see picture below)



The **Table of Contents** reveals a list of the **modules or chapters**.



Select any chapter/module title and explore each of **3 TABS** (**Read, Resources, Details**).

- **READ** contains the **TEACHING GUIDE** with lessons, course materials, additional resources/assignments, standards covered and other.

The **TEACHING GUIDE** is the principal source of materials (see more details below about the Teaching Guide).

- **RESOURCES** may list the chapter's contents.
- **The DETAILS tab** describes the module, difficulty level, and other pertinent information.

The screenshot shows the CK-12 website interface. At the top, there are navigation links: DASHBOARD, CLASSES, LIBRARY, SUBJECTS, and EXPLORE. A search bar is on the right. On the left, there is a sidebar with options like 'Assign to Class', 'Add to Library', 'Share with Classes', 'Add to FlexBook® Textbook', 'Customize', 'Quick tips', 'Notes/Highlights', 'Download PDF', and 'Offline Reader'. The main content area has three tabs: 'Read' (selected), 'Resources', and 'Details'. Under the 'Read' tab, the 'TEACHING GUIDE' is displayed. It includes a table with the following information:

TEACHING GUIDE	
COURSE	Algebra 1 – Project SOL
UNIT 1	Fixed-Value Quantitative Relations and Formula-Defined Relations
MODULE 1	Number & Quantity
CHAPTER SECTION	Pre-Algebra Review

Below the table, there is a section for 'PREREQUISITE SKILLS' with a list of hyperlinks:

- [Add, Subtract, Integers](#)
- [Multiply, Divide Integers](#)
- [Add, Subtract Rational Numbers](#)
- [Multiply, Divide Rational Numbers](#)
- [Understand absolute value expressions](#)

At the bottom of the guide, there is a 'TIME MANAGEMENT' section.

F. Plan Lessons using the Teaching Guide

Look at the **TEACHING GUIDE** under the **Read** Tab. All Project SOL Teaching Guides contain:

- **Prerequisite Skills** identify the skills students should have already mastered in order to work on the particular content lesson of each chapter. **Prerequisite Skills** are hyperlinked to related CK-12 Textbook Chapters so that teachers can explore and review those with their students.
- **Time Management** suggestions estimate the time required to teach the lessons.
- **Teach the Lesson** provides suggestions for the opening, body, tasks, and closing elements of the lesson. Materials are hyperlinked for simple access.

- **Suggested Assignments and Assessments** are described in the text section of the teaching guide, and are relisted in a table at the bottom for your convenience.
- **Links** direct you to **CK12 Textbook chapters, Exploratory Tasks, Exercises, Concept and Performance Tasks, and Supplemental Resources.**
- Remember the **Language Selection Tool** located at the bottom of the page? Use it and show your students how to toggle between different languages. Before downloading **Flexbooks** or resources, you may convert them to Spanish or other languages with this tool.

G. Share Lessons with Your Students

- a. Use the **SHARE WITH CLASSES** located on the **LEFT MENU BAR** to distribute the materials to your students.

The screenshot shows the CK-12 website interface. At the top, there is a navigation bar with 'DONATE', 'HELP', and a user profile for 'SOL TEACHER'. Below this is a search bar with the text 'What do you want to learn today?'. The main content area displays 'ALG 1: Unit 1, Module 1, Number and Quantity' with a difficulty level of 'At Grade' and 'Created by: UCLA P'. A 'Table of Contents' section is visible, listing '1.0 Pre Algebra Review' and '2.0 Properties of Exponents'. On the left side, there is a 'LEFT MENU BAR' with options: 'Add to Library', 'Share with Classes', 'Add to FlexBook® Textbook', 'Customize', 'Download PDF', and 'Offline Reader'. A 'Share with Classes' dialog box is open, showing a checkbox for 'Project SOL Demonstration Class', a 'Share' button, and a 'Create a New Class' link. An orange arrow points from the 'Share with Classes' button in the menu bar to the dialog box.

- b. After clicking **SHARE WITH CLASSES**, you will be prompted to share the materials in the current unit/module, or create a new class for sharing. You can “create a new class” for different classes you teach.
- c. **CUSTOMIZE** allows you to adapt an item, for example, create a new title for a worksheet or video in a way that resonates with your proposed instructional plan.
- d. **Download PDF** generates the document you are viewing and emails it to you.

H. Using Project SOL 2.0 in Schools

Given the range of teachers' technical expertise and skills, the online course platform provides for highly flexible use based on your needs. Internet quality and availability, classroom structure, computer/e-device access, your colleagues' interest in collaborating to customize SOL 2.0 courses, and other issues impact how you choose to utilize the SOL materials.

Students May Have Daily Access to Individual Computers:

If students can access the online courses on individual computers/devices at school, in a computer lab, with iPads or laptop computers, you can easily share the Module/Flexbook and direct them towards a specific lesson by using the "Create a Class" feature in CK12.

If students use an individual Internet device, they can actively use the curriculum at their own pace, and explore the online courses at their own speed and/or as directed by you, their teacher. You will have to adequately prepare students to log in and access the courses/classes, and then check-in regularly and frequently with students. See instructions on page 3 to sign-up/log-in as a student, using a student code rather than teacher code. CK12 has many tutorials at their **HELP CENTER**.

Students May Need to Share Computers

If students lack access to a computer at the school, you can also select specific resources and/or assignments for which pairs or triads of students can work on together.

Projecting the Curriculum

If students do not have access to computers for instruction, you can show SOL 2.0 materials via a projector and screen/white board. In this case, you can select activities and online videos that allow students to tackle, view and listen using a large screen and speakers.

Using SOL Materials as Handouts

In all cases, you can print documents from CK-12 modules to supplement or replace the on-line versions.

Employing a Bilingual Curriculum

Project SOL 2.0 provides options for teachers serving students of diverse language needs. A bilingual, online, free and adaptable teacher-friendly resource, this curriculum can serve as a stand-alone CCSS-aligned course for secondary math teachers. It can also function as a helpful supplement that supports Spanish-dominant English learners, who need some primary language scaffolding to master the subject-specific academic language of math courses.

School leaders of bilingual secondary programs, dual-language and International Baccalaureate programs might also be interested in using the Spanish-language math curriculum if they lack content-specific materials in the second language of instruction.

Since SOL 2.0 math courses/classes allow teachers and students access to content and materials in two languages, these materials provide an adaptable way to deal with scheduling, references to concepts in whichever language teachers or students are most comfortable using, and can be

a way to avoid barriers caused by vocabulary that unnecessarily inhibits conceptual learning. The availability of math courses in Spanish allows students to maintain learning in a second language across disciplines, and supports teachers' possible concerns about teaching content in Spanish -- if it is not their primary language -- by enabling them to compare their materials in both their primary and secondary languages. SOL 2.0 materials are directly comparable and available in English and Spanish (and in the various other languages offered by the CK12 platform).

Demonstration Video on Project SOL 2.0

In this [short video](#), Teacher-Specialist Cesar Fuentes demonstrates how he utilizes the Project SOL bilingual materials in his Algebra 1 high school classroom. You can view the video is online: <http://civilrightsproject.ucla.edu/resources/projects/project-sol/project-sol-2.0>

Other Resources

More resources for teachers of English language learners:

<http://www.colorincolorado.org/new-teaching-ells>

Open Education Resources:

<https://www.uen.org/oer/>

<http://www.purplemath.com>