PROGRAM COMPONENTS

MathLinks: **Grade 6** consists of 10 consumable or digital packets for students plus various support components designed in response to a need for instructional materials to align with the 2010 Common Core State Standards (CCSS-M). The program was developed at the Center for Mathematics and Teaching (CMAT), a nonprofit education group led by mathematics educators and mathematicians who worked in the UCLA Department of Mathematics until 2010.

Before embarking on the *MathLinks* journey, here are brief explanations of some of the program's components.

STUDENT PACKETS

Ten consumable or digital **Student Packets** (SP) with structured workspace help students stay organized and focused on the time spent doing mathematics. This lessens the need for rote notetaking and emphasizes time spent on developing concepts, solving problems, and practicing skills.
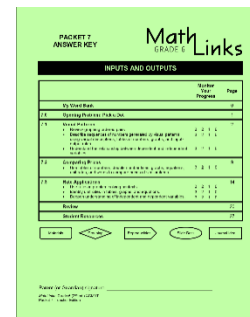
- **Opening Problems:** Each packet begins with an Opening Problem. Spend a typical class period or less on this to start. Sometimes it is completed in one sitting; sometimes students will revisit it after some instruction.

- **Lessons:** Every packet includes three or four multiday lessons that each typically take 2 – 4 class periods to complete. After Getting Started, the pages address new concept development, skills practice, and applications. The pages that link to slide decks (see Teacher Edition) contain insufficient information to be done without some guided instruction. Students will benefit from collaboration and discussion on these pages. Other pages address new content, which may require guided instruction or partner work, and Practice pages may be done with partners or individually.

- **Review:** The Review section typically includes activity-based options, which are frequently intended for use with partners. It also includes Spiral Review pages for keeping sharp on topics in previous packets, and a Packet Reflection page that is designed to help students make connections among concepts learned and monitor their mathematical growth.

- **Vocabulary:** Encourage students to keep track of targeted vocabulary in My Word Bank, which is located at the front of each packet. A Vocabulary Review crossword puzzle is included in each Review section. The Student Resources section at the end of each packet contains precisely defined vocabulary with additional explanations and examples.

- **Homework:** Homework choices from the SP are the discretion of the teacher. Common choices include (1) finishing pages started in class, (2) pages named Practice, (3) Spiral Review pages near the end of each packet, skills practice pulled from the Extra Problems file, and (5) unfinished work from previous packets.
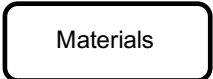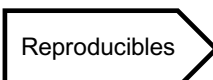
TEACHER EDITION

The **Teacher Edition** (TE) for each packet contains information to assist teachers in planning and carrying out the instructional plan for each SP.

- **"Front" Section:** The TE begins with a wealth of information to support instruction. The Packet Planning page includes pacing suggestions, lists of materials, prepare-ahead guidance, and more. Practical instructional ideas are included for English learners, special learners, struggling learners, and enrichment. The Standards for Mathematical Practice are detailed, along with specific examples of their applications. Math Background and Teaching Tips provide insight into content and pedagogy. Reproducibles (blackline masters) for the packet are located at the end this section.

- **Student Packet (SP) with Answer Key:** Next is the SP with answers.

- **Lesson Notes** and **Slide Deck Alternatives:** Slide Decks that help pace and guide instruction of important concepts, and are located in the Teacher Portal. Each Slide Deck is accompanied in the TE by a short set of Lesson Notes and a Slide Deck Alternative. Teachers may choose to follow the slides with accompanying Lesson Notes, use the Slide Deck Alternative to guide the lesson, or teach content in their own style. For distance learning, slide decks make remote learning instruction more dynamic.

- **Lesson Icons:** At the bottom of pages in the TE, you will find icons to guide planning.

Materials	This suggests materials for the particular page. For long term planning, a list of materials for SP are listed in the front of each TE, and materials for the course are listed in program information.
Grouping	This suggests grouping arrangements for an activity. For example, "2+" indicates that this is appropriate for two or more students to collaborate.
Reproducibles	This suggests Reproducibles for the activity. For example, the first Reproducible for Packet 2 will be identified as R2-1. Reproducibles are located at the end of the front section of each TE packet as well as in the Teacher Portal for that packet.
Slide Deck	This indicates that a slide deck (and a Slide Deck Alternative) are available for this part of the lesson, along with Lesson Notes. For example, "S1.1a" identifies the first slide deck for Lesson 1, which will be located in the Teacher Portal for that packet.
Journal Idea	This suggests problems that may be appropriate for journal entries. For example, "Problem 5" indicates that this problem could be a journal entry. In addition, the prompt "Monitor your Progress" is a reminder to ask students to complete the 3-2-1-0 scale on the front of the packet as a self-assessment. This may also be expanded with explanations in a journal.

TEACHER PORTAL

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MathLinks includes a rich collection of resources that are available through our password-protected Teacher Portal (https://mathandteaching.org/teacher-portal-core-2nd-ed/). Logins are available through your administrator or from the Center for Mathematics and Teaching directly. To maintain security of the assessments and answer keys that are housed here, please do not make this portal accessible to students or parents. Teachers are welcome to download useful resources to a virtual classroom space for student and parent use. All files in the teacher portal may be printed. except for the SPs, which are copyright protected.

When you log into the portal, you see will buttons for the three CORE MathLinks grade level programs and MathLinks Essentials. Purchased components will be activated. MathLinks Skill Boosters and Puzzles and Games are available to all users.

- The tabs for **Grade 6**, **Grade 7**, and **Grade 8** include both packet specific and general resources for instruction.

- **Skill Boosters** lay out a distributed practice routine for selected, important, below grade level topics. They are intended for daily use in increments of about 5 to 10 minutes for the purpose of catching students up. They do NOT connect to *MathLinks* courses and any specific way. Use as desired.

- In **Puzzles and Games**, you'll find complete books written by Carole Greenes for *MathLinks* users as well as collections of activities from the MathLinks Team. Use these for engaging practice and enrichment.

- *MathLinks Essentials* is a flexible, modular program designed to help students catch up in middle school mathematics.

The **Grade 6** tab opens to a wealth of resources to support instruction.

The left side includes **Packet Resources**. Each packet has its own pull-down menu:

- **Teacher Edition (TE) and Slide Decks:** Here you will find a printable version of the TE, Reproducibles, and all Slide Decks as PowerPoints and Google Slides.

- **Student Packet (SP):** The version on the portal may be used for projection if desired. To translate SP text into practically any language for English learners, put the Text File for Translation into a translation program (such as translate.google.com). Students will be able to use the translation alongside the SP to increase comprehension.

- **Assessement and Packet Resources (PR):** Quizzes, Tasks, Projects, and Extra Problems are available, along with answer keys, in both .docx and .pdf formats. Essential Skills, Math Talks, Nonroutine Problems, Tasks, Projects, and Technology Activities are all available as printable worksheets with answer keys. These materials allow the teacher to differentiate instruction for to a wide range of learners and interests. Additionally, you'll find Parent Letters in English and Spanish.

General Resources are located on the right side of the landing page.

- **Program Information:** This section includes the basic program information. For example, get insight into the design principles and philosophy of the program through essays about "Focus, Coherence, and Rigor in *MathLinks*" and "Universal Design for Learning in *MathLinks*". Read explanations about features built into the program to engage students and for assessment. Check out correlations to Common Core Standards and Practices for many components.

- **Getting Started with *MathLinks* and Getting Started Videos:** This section includes: Program Components, Lesson Planning information, material and copy lists, and links to short videos that introduce the philosophy, structure, and features of *MathLinks*.

- **Student Engagement and Activity Routines:** Read explanations about features built into the program to engage students. Learn about activity Routines that are recurring features in *MathLinks*, designed to engage students in problem solving and practice. Activity Routines typically appear in the Review section of the SP or in one of the Packet Resources (PR) associated with a packet (i.e. Essential Skills or Nonroutine Problems). Detailed instructions with sample introductory activities are included here. We recommend that teachers use these activities to establish classroom norms and procedures for the activities.

- **Assessment Option and Tests:** Read about the different assessment options. A pre-assessment and cumulative assessments for the program, called Tests, are located here.

- **Complete Student Resource Guide: Grade 7:** A complete Student Resource Guide is available to reference by teachers, students, parents, and others supporting instruction.

- **Parent Support:** An introductory letter about the course as well as packet specific letters in both English and Spanish are available here.