Some Thoughts and Suggestions for Teaching Kindergarten Everyday Mathematics Remotely

Introduction

Many teachers know about the variety of Everyday Mathematics resources that are available on ConnectED for themselves and their students to use remotely while schools are closed. However, many educators have asked for ideas and recommendations about how to organize and implement these resources in ways that try to make use of EM lesson components and approximate (even if very imperfectly) features of EM classroom experiences. The ideas below are simply a starting point for you to adapt and customize for your own particular circumstances, and we encourage teachers to share other ideas with each other and with us. We have included starting-point suggestion for two different scenarios below:

- Scenario 1: Students have decent internet access at home and can join synchronous sessions at least 2 times per week
- Scenario 2: Students have spotty internet access at home; can't count on synchronous sessions, but may be able to access or watch videos on own time

Weekly Math Menu

Each scenario revolves around a **weekly Math Menu** (see p. 4 for a <u>sample Math Menu template</u> and p. 5 for a <u>sample completed menu</u>) that consists of activities that you compile (as paper packets or printable docs, as digital links, or some combination, depending on your situation¹). The activities in the weekly menu are drawn primarily from two EM lessons² that you choose to focus on that week, as well as activities related to topics you'd like students to review and/or practice. The Math Menu can consist of activities drawn from the following EM components, as well as any other related supplemental resources your students can access:

- Ongoing Daily Routines (see next page for specific suggestions; directions for Routines procedures can be shared via e-mail, google doc, etc.)
- My First Math Book pages or Math Masters (posted, e-mailed, or printed as pdfs, or accessed on ConnectEd)
- Differentiation Options (post instructions, in addition to Math Masters for some, and some can be shared via Activity Cards see next bullet)
- Activity Cards (posted, e-mailed, or printed as pdfs, or accessed on ConnectEd; consider materials requirements and substitutions; also consider partnership requirements)
- Connections (post or e-mail instructions; consider materials requirements)
- EM Projects (accessible and downloadable from ConnectEd in Grade-Level Resources)
- Do-Anytime Activities List (accessible and downloadable from ConnectEd in Grade-Level Resources)

The Math Menu can include a mixture of "must-do" and "may-do" activities for the week, as well as games (online or face-to-face) and other grade-appropriate activities. It may be helpful to include time expectations for different activities on the Math Menu or provide families with guidelines for total

¹ For tips on how to access EM program resources digitally or as pdfs, see McGraw Hill's <u>remote-learning program resources</u> page and the <u>e-Learning Gallery</u> on the EM Virtual Learning Community.

² See this document for some suggestions about which lessons you might prioritize. Other considerations for selecting lessons include availability of materials, need for partners or small groups, and complexity of instructions. For some topics, it may make sense to use a different presentation format, such as a short video of you teaching or explaining a particular concept, skill, or task; a game video; or a video from a supplemental resource.

time to spend on math each day or week. It may also be helpful to create a one-time family support document with links to videos such as those suggested above or to other vetted websites. Even if you can't do any online sessions with/for your students, a weekly Math Menu may be a good organizer for their math work.

Ongoing Daily Routines

Kindergarten children can benefit from continuing to do some of the Ongoing Daily Routines while at home. Here are some thoughts about the ones that might be best adapted for home use and how they might be implemented at home:

- Number of the Day: Tell children what number to start from (the day of your last day at school). Then have them add the number of the day for each weekday to a growing number line at home made on a strips of paper taped together, index cards, stick-on notes, or something similar. You might also invite them to add a penny or other object to a jar each day. You might provide families with ideas for brief, playful activities they can do each day based on the number of the day, such as:
 - o counting up from the number of the day to another number they decide (e.g., up 10 numbers);
 - o counting back from the number of the day to another number they decide (e.g., back 10 numbers);
 - o playing "Monster Squeeze" using a stretch of their number line;
 - o doing that number of jumping jacks or other exercises;
 - o finding that page number in a large book;
 - o thinking about the number as hundreds, tens, and ones (e.g., 123 is the same as 100 and 20 and 3)
 - o thinking about a number story related to the number;
 - o ideas they think of (and share with you and the class)!

If/when you hold a synchronous session, you might do some of the number of the day routine activities with them (counting up to or back from that number; thinking about its place value, etc.).

- Daily Schedule and Monthly Calendar: Families can use pictures on index cards or self-stick notes to create their own schedules for the day, which children can track with a paperclip or arrow. They can also read and mark off the date on a calendar each day. If/when you hold a synchronous session, you might count up to or back from the date number, use it in number stories, or show a calendar on the screen and pose questions such as:
 - What is the date tomorrow? What was it yesterday?
 - How many days until Friday?
 - On which day did this month start? On which day will it end?
 - How many Wednesdays are in this month?
 - \circ What are different ways we can add numbers to get to today's date number? (e.g. 10 + 2 + 1 for April 13)
- Weather Observation: Show families how to create a simple Weather Tally Chart where children can add tally marks for different weather conditions (sunny, cloudy, rainy, foggy, etc.). (You might want to share a template they can download, print, or copy.) Children can also draw pictures of the day's weather on index cards or self-stick notes and add them to a calendar or line them up by weather type to create a weather bar graph. If/when you hold a synchronous session, you might talk about and compare their compiled weather data.

Schedules and Components

Scenario 1: Students have decent internet access at home and can join synchronous sessions 2 times/week.

Here's what a schedule might look like for two lessons: Lesson A and Lesson B + Ongoing Daily Routines + any additional activities.

Monday (Lesson A)	Tuesday	Wednesday (Lesson B)	Thursday	Friday
Before Synchronous Session Students complete whatever Ongoing Daily Routines you have specified (see above); if possible,	Students complete whatever Ongoing Daily Routines you have specified (see above)	Before Synchronous Session Students complete whatever Ongoing Daily Routines you have specified (see above); if possible,	Students complete whatever Ongoing Daily Routines you have specified (see above)	Students complete whatever Ongoing Daily Routines you have specified (see above)
children share schedules for the day	Students work on Math Menu Provide guidelines such as:	children share schedules for the day	Students work on Math Menu Provide guidelines such as:	Catch-Up and Games Day
Synchronous Session	Complete Lesson A "must-dos"	Synchronous Session	Complete Lesson B "must-dos"	Students complete any unfinished "must-dos" from the weekly menu
(whole or half group or smaller): -Choose a synchronous activity related to one or more of the	Complete at least one "may-do"	(whole or half group or smaller) -Choose a synchronous activity related to one or more of the	Complete at least one "may-do"	Students play at least one game from the Math Menu
Ongoing Daily Routines (see above) or play a counting game or		Ongoing Daily Routines (see above) or play a counting game or		
share/discuss a number story.	Virtual Office Hour	share/discuss a number story.	Virtual Office Hour	Virtual Office Hour
-Facilitate condensed version of the Focus activity	Support students as needed	Facilitate condensed version of the Focus activity	Support students as needed	Support students as needed
-Go over Math Menu activities				

You may also choose to create videotaped segments of Focus activities of additional lessons. If you do this and put lesson segments on M, T, and Th (with work time and catch-up on Wednesday and Friday) in the schedule above, you may be able to move through an additional lesson each week, but three lessons per week is probably the limit of what is reasonable for teachers and students under these conditions!

Scenario 2: Students have spotty internet access at home; can't count on synchronous sessions, but may be able to download or watch videos on their own time. For this scenario, you might either:

- Follow the same schedule as Scenario 1, but record the synchronous sessions so students can watch them as they are able
- Replace synchronous sessions in the Scenario 1 schedule with videotaped segments of you teaching a condensed version of the Focus activity. Omit the discussion about the Routines, , or replace it with additional games in the Menu.

Assessment

If students can complete their My First Math Book pages or Math Masters pages within the Student Learning Center (SLC) of the ConnectEd platform, teachers can review and assess their work via ConnectEd. Students can take a picture of their Math Menu and e-mail it to you or post it somewhere at the end of each week. You can use these for assessment purposes. You can also have kids create and share an artifact related to the lesson's Assessment Check-In.

Sample Weekly Math Menu Template

Must-Dos	May-Dos
☐ Ongoing Daily Routines	☐ Activity Card X
☐ Lesson A My First Math Book Page (if applicable, Tuesday)	☐ Activity Card Y
☐ Lesson B My First Math Book Page (if applicable, Thursday)	☐ Differentiation Option Title 1
	☐ Differentiation Option Title 2
	☐ Connections Activity Z
Games	Do-Anytime Activities
☐ Game 1	☐ Choose an activity from featured EM Project
☐ Game 2	☐ Choose a Do-Anytime Activity
My favorite math activity this week was (draw or write)	Something I learned was
	Something I still have questions about is

Sample Weekly Math Menu, Grade K, Section 7

Two Focal Lessons: 7-1: Number Line Addition and Subtraction and 7-2: Domino Addition

May-Dos Must-Dos ☐ Activity Card 62 Ongoing Daily Routines (Extra Practice from Lesson 7-2) Materials needed: dominoes or domino cards: ☐ Lesson 7-2 My First Math Book page 11 (Thursday) numbers 0-12 each written on individual stick-on notes or index cards ☐ Lesson 7-2 Home Link: Sort household objects according to a rule ☐ Activity Card 61 (Enrichment from Lesson 7-2) Materials needed: dominoes or domino cards ☐ Lesson 7-2 Connection: Create and play your own games using dominoes or domino cards Do-Anytime Activities Games ☐ From Project 3: Fun with Games ☐ Number Line Addition and Subtraction Play Nine Holes Create a 0-20 walk-on number line at home by writing each number on a piece of paper and taping them to the floor, or by writing them Materials needed: Nine Holes directions, Nine Holes Game board, 6 with chalk outside. Customize a regular six-sided die for the game by coins, buttons, etc. for game pieces covering the 4, 5, and 6 sides with tape and marking them with a -1, -2, and -3. (The other sides can represent +1, +2, and +3.) Begin on ☐ 3rd Quarter Do-Anytime Activity: Gather several items of the same type, such as stuffed animals, dolls, the 0 space and take turns moving forward and backward on the number line according to the dice rolls. trucks, cars, or balls. Think of a rule for sorting the objects into two groups. For example, sort stuffed animals into two groups: one group that has tails, and another that does not have tails. Ask, "Why do ☐ Train Games Login to the ConnectEd Student Center, click on "EM Games these animals belong together?" and have your child tell you the rule. Online," and select "Train Games". ☐ Survey Routine: Choose a question that interests you, survey family members, and record your results on Math Masters p. R7

My Reflection on Math for this Week			
My favorite math activity this week was (draw or write)	Something I learned was		
	Something I still have questions about is		
	Something 1 still have questions about is		