



Mathematics Distance Learning, 6-12

A digital version of this document can be found at <https://sde.ok.gov/covid19-instruction-support>.

This document is designed to support Oklahoma teachers and districts as they provide distance learning opportunities for students. Distance learning aims to provide students with continuous learning opportunities at home and may or may not include technology.

Questions to Consider while Planning for Continued Learning

1. What are reasonable goals for student learning in your context? What experiences should be prioritized? Keep in mind:

- Your district's and school's guidance and directives
- Access to technology/internet/phones
- Responsibilities to family, work outside of school, etc.
- Current understandings and background knowledge of your students
- Experiences designed to enrich prior learning versus expecting students to learn the remaining standards or engaging in learning experiences that are time consuming/"school-as-usual"

2. What is your district and/or school's recommended math learning time each day? One recommendation for mathematics follows:

- **Prekindergarten - Kindergarten:** 15 minutes, daily
- **1st - 5th Grades:** 20 minutes, daily
- **6th - 12th grades:** 40-60 minutes, 4 times a week
- **Note:** Most activities will take longer for students to complete than you may estimate. Be mindful of your district and school's guidance for instructional minutes for math each day/week.

3. What types of assignments will you be giving? Are there opportunities to:

- "Combine" courses and issue a similar assignment to multiple classes?
- Enrich material learned earlier in the year?
- Apply math and science learning to a grade-level appropriate STEM project?

4. What will be the structure of a typical day of learning? Things to consider:

- Student access (will they require hard copies or can work be accessed digitally?)
- Type and length of task (use your district and school guidelines)
- Plans to engage students through digital platforms, on the phone, or with other members of their household.
- Ways to "collect" or see student work (Collect digitally at the end of each day, each week, as students finish, not at all, or have conversations about the work over the phone/online.)



5. How will your students be supported during their work on a given math topic, activity or project? Some ways could include:

- Probing questions to encourage accessing background knowledge, discussion and/or research
- Short videos explaining the topic (recorded by teacher or external source)
- Written examples
- Live sessions where example is modeled by teacher and/or student
- Providing feedback on student work over the phone or online

6. How does some of the work connect to other curricular areas, and how might you collaborate with the students' other teachers on some topics or projects? Examples of cross-curricular tools:

- Relevant articles that connect to math tasks
- STEM activities related to the math students have been learning
- Physical movement connected with various mathematics topics

For specific guidance related to **Special Education** and **English Language Learner** instruction, visit [Special Education](#) and [English Language Learners](#).

Considerations for Universal Design can be made to ensure all activities are accessible for all learners. Learn more about [Universal Design for Learning](#).

Learning about Teaching in Online and Remote Learning Settings

- [Teaching Remotely in Times of Need](#)
- [NCTM Webinars](#)
- OETA PD for Teachers and Parents (coming soon)
- [Distance Learning with Google](#)
- [Distance Learning with Microsoft](#)

Tools to Help Students Engage in Discussion

Platforms

- Face-to-face discussion with members of students' household
- Phone (texting/calling, [FreeConferenceCall.com](#), [Remind](#))
- Online Chat ([Google Classroom](#), [Slack](#), [Microsoft Teams](#), [Twitter](#), [Facebook](#), [Instagram](#))
- Learning Management System ([Google Classroom](#), [Blackboard](#), [Canvas](#), Online Blog)
- Live Communication Platforms ([Zoom](#), [Skype](#), [Hangouts](#), [WebEx](#), [Teams](#))

Questions and Conversation Guides to Encourage Discussion

- [Conferring with students](#)
- [Talk moves](#)
- [STEM Teaching Tool: Partner Conversation Supports](#)



Example Activities

Sample Activities for Middle and High School are listed below. [View a sample secondary learning menu here.](#) If you have additional ideas for investigations, please consider adding them to [this survey](#) that will then be used to update examples.

Middle School (Grades 6–8)	High School (Grades 9–12)
Using the food labels on boxes of cereal or other food items, determine the number of calories in multiple servings of that item. How many calories in half a serving, $\frac{1}{4}$ of a serving, etc.? What if you were feeding 20 people? 35 people? Your school?	Create a catapult using items found in your current location. Fling a small object (gummy bear, coin, etc.) and draw a picture representing its movement through the air. Add and label an x- and y-axis to your drawing. How can you make your object go higher/farther? How does the graph change?

Stay Connected to Community:

You aren't alone. There are thousands of other teachers around the state and nation who are collaborating and sharing strategies, resources, and ideas for continuous learning for students while at home.

Facebook Groups:

- All Grades: [#OKMath](#)
- Grade 6: [#OKMath6](#)
- Grade 7: [#OKMath7](#)
- Grade 8: [#OKMath8](#)
- Algebra I: [#OKMathA1](#)
- Geometry: [#OKMathG](#)
- Algebra II: [#OKMathA2](#)
- Statistics: [#OKMathStats](#)
- CCMR/HSMR: [#OKMathReady](#)
- Math Teacher Circles: [#OKMTC](#)

Twitter Users and Hashtags:

- [#OKMath](#)
- [@oksde](#)
- [@christinegoko](#)
- [#MTBoS](#) (National)
- [#iteachmath](#) (National)

Instagram:

- [@okmathteachers](#)

OSDE-Hosted Virtual Zoom Meetings, Every Tuesday 2:00-3:00 p.m.

- Link: <https://zoom.us/j/859693051>
- Meeting ID: 859-693-051
- Phone: (346) 248-7799

Digital Resources

For the latest digital resources that will help support remote learning, visit the [digital resources list](#).

Contact Information for OSDE Math Staff

We are here to help in any way we can. Feel free to email any of the following people at OSDE if you have questions or need support.

- **Christine Koerner**, Director of Mathematics, christine.koerner@sde.ok.gov
- **Lauren Jenks-Jones**, Math Specialist, lauren.jenks-jones@sde.ok.gov