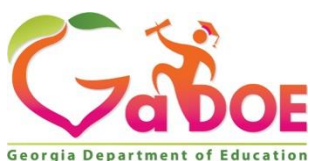


Support for Students’ Science Learning During School Closures

**Suggestions for Students Continuing Science
Learning at Home**



March 27, 2020



How can you continue science learning at home?

You do not stop learning science when you leave the classroom. Science is all around us, including at home! You can continue to explore the world around you, understand natural phenomena, and solve engineering problems from your own home.

Don't Forget

- **Your physical and emotional well-being are most important.** Take care of yourself and do not be afraid to ask adults for information or support.
- **Learning at home is a unique opportunity!** Learning at home and learning at school are different. At home, you can work with your family. You can connect science to your home life and interests. This is an opportunity to explore something that really matters to you!
- **Don't stress too much!** Learning science at home might be really new for you. Remember that a lot of people are feeling this way too. Do your best and explore science that matters to you.

Recommended Actions You Take

- **Explore science that matters to you!** Is there something you've always wondered about--maybe why something happens the way it does, or a problem you want to solve? What do you already know about this? What does your family know? What are the next steps you might take to figure this out? You might:
 - Look for information from a trusted source.
 - Design an experiment and collect data about something you are wondering about.
 - Build or draw a model that shows why something happens or how something works.
 - Figure out a solution to a problem you have noticed and explored.

Be creative! You can use your science experiences to work on something you really care about.

- **Set some goals for your own learning.** Setting learning goals can help us make a plan to be successful. Think about something you would like to learn, understand, or solve. You can share your learning goals with a family member, friend, classmate, or your teacher to help you. Try to make your goals **SMART**:
 - Specific: What exactly do I want to happen?
 - Measurable: I will know I have reached my goal when...
 - Attainable: With hard work, is it possible to reach this goal in the time I have?
 - Realistic and Relevant: My goal is important enough for me to put a plan into action! I will do these things to reach my goal...
 - Time-bound: I will reach my goal by...



- **Find a Thinking Partner!** As you are doing your science learning, who can you stop and think with? They might be members of your family, your friends, or other students from school. A phone call, text, video chat, email, or even connecting on social media should work if you can't sit down and talk with them in the same room right now. People learn best by talking and thinking with each other.

- **Work on Your Own and With Others!** When you try to figure out a science phenomenon or solve an engineering problem, think through your ideas first. Then check in with others to see what they think. If possible, do the experiment or design challenge together—even if you aren't in the same location. If you get stuck or frustrated along the way, ask others to listen to your thinking, share other perspectives, or give feedback. Some ways you can think with others even when you're not in the same place might be:
 - Keep a journal or scrapbook of your ideas and thinking. Swap with a classmate and write notes back to them or talk through your ideas with a family member or friend.
 - When you are reading something, imagine a classmate or one of your teachers is also reading it. What would you say to them? What might they respond? Write

- **Reflect on your own learning!** One of the most important ways we build our understanding is by reflecting on *what* we are learning, and *how* we are learning it. You can do this with a partner, or by yourself. When you finish your work on science for the day, think about these questions. You can write, draw, or talk through your answers with a friend or family member:
 - What are some of the most interesting discoveries I made while working on this project?
 - What were some of the most challenging moments, and what made them so difficult?
 - What were some of my most powerful learning, and what made them so meaningful?
 - What is the most important thing I learned?
 - What moments during this work made me most proud?
 - Why was this project important to me, my family, or my community?
 - How did this work move me toward my science learning goals?

- **Document and Share What You Learn!** Try to capture what you think and learn in a way that you can share with others. You could write or draw your ideas, make a short video of your thinking and work, take pictures of your work, or record an important conversation you're having with your family or classmate. Be creative! What makes the most sense for you to capture and share your own learning?

