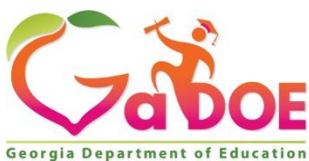


Science Support for Families During School Closures

**Ideas for How Families Can Support Students' Science
Learning at Home**



March 27, 2020



How can families support students' science learning at home?

Parents, families, and home guardians play a critical role in science learning at home. Since no two families are alike, families can support their children in a variety of ways.

Don't Forget!

- **Student, family, and community physical and emotional well-being are most important!** As schools close, and the news cycle is dominated by information about the crisis, it may be frightening or confusing to children. Take care of your child's emotional and health needs during this time. Do not neglect your own needs and reach out to available community networks and resources.
- **Home-based learning is unique and should not try to recreate school.** Trying to support school-like learning in a home setting may frustrate teachers, students, and families without leading to real and lasting learning. Instead, work with your child to have meaningful science learning experiences that connect to your home lives, interests, and identities. Some everyday activities that can promote meaningful science learning could include cooking, baking, cleaning, reading together, building, painting and drawing, and taking a walk outside.
- **Use technology in smart ways.** Meaningful science learning can happen with or without devices or access to the internet. If you do have access to technology to help your child, use technology to enhance learning. People learn best when they can figure things out together. Consider using devices and internet access to help learners find information they can use to figure something out; to make connections with others to build ideas and get feedback; and to share their thinking.

Recommended Actions You Take

- **Model the Learning Process.** You don't have to be an expert in science! One of the most supportive things you can do is to be a partner in your child's investigations and thinking. Think out loud or describe what you are doing as you do it, whether it is cooking, fixing something, taking care of pets, or other housework. Ask questions, even when you do not know the answer! You and your child might learn something new together.
- **Be a Thought Partner.** Support your child's reasoning by talking with them about their science learning. You can ask your child questions, like "What do you notice? What do you wonder? Why do you think that's happening? What can you teach me about this?" Let your learner bounce ideas off of you--remember, you don't need to know the answer, just help them surface current understanding, deepen their thinking, and identify and figure out next steps to figure out more.



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- **Talk!** As you work with your children on their investigations, you can engage in a range of productive types of talk. You can try using some [“talk moves”](#) with your learners to help them think more deeply. If you want to learn more about how to use these moves, different kinds of productive talk, check out [this blog post](#) about using talk moves, this [primer](#) that helps describe talk strategies, and [this series of videos](#) used to help teachers use productive talk.
- **Focus on Science in Everyday Life.** Many activities you regularly do can support meaningful science learning! To explore the kinds of connections that are possible, you can do Internet searches like “science of [EVERYDAY ACTIVITY]” (e.g., construction, cooking, gardening, washing). This can open up all sorts of meaningful questions that may lead to your child making sense of something they observe in the world and solving problems they encounter (e.g., how does soap work, how do we hear sounds).
- **Connect Science to Your Work or That of Your Family.** There may be meaningful ways to engage your child as part of your own work that can contribute to meaningful science learning. In your work or that of another family member, how do you find the answers to your questions? How do you communicate techniques, processes, or ideas? What problems or challenges might you face? Share your work and allow your child to think and work with you in a meaningful, career-related context.
- **Build from the Science-related Interests of Your Children.** You know your child — consider whether they have personal, family, or community interests that they do not always get to pursue in school and let them do a project related to that interest. Think about challenges facing your community, ideas or activities your child is passionate about, or even ideas that have come from books or television. Science is everywhere!
- **Don’t stress about creating a perfect homeschool experience.** This situation is stressful and might be scary for your child and your family. Learning happens all the time--when we are baking or cooking together, building the best fort we can, making art, reading novels, writing stories, and taking a walk outside. Engage your child in activities you love doing together and explore what you can learn through those experiences. Your family might even look back on this time as some of the most meaningful learning experiences!



Using Technology to Enhance Learning.

If you have access to the internet and a device students can use, technology and internet access can help students dive into science learning at home. Some helpful examples are listed below. Please note that these examples illustrate the kinds of ways technology can be useful to your child's learning--there are many other resources that you might find helpful in similar ways!

- Several museums and zoos have special opportunities to engage virtually while they are closed--for example, the Georgia Aquarium is releasing a series of webcams, investigations, and other creative activities to engage students in meaningful and fun STEM learning. When making use of these online resources, look for work that your child would find interesting, and participate with them if you can! Make sure to check out what your local science center, nature center, or zoo is offering!
- [GSTA Phenomena bank](#) is a site that collects and shares intriguing and puzzling things that happen in the world that your students can explore. Consider finding a phenomenon together that your student is interested in, and prompt them to describe what they notice and wonder about it. Then ask your child to connect with other family members or friends via phone or computer to discuss why they think that happens, then find videos or articles online that help to explain parts of the occurrence and connect it to their thinking.

If your child is already connected to social media, consider ways they can use their social networks to discuss ideas, give each other feedback, and deepen learning. This might look like creating a series of videos of a common experiment they are conducting to share results and look at patterns; creating a twitter or instagram hashtag that students use to document and follow a shared conversation or topic they are investigating; creating a sharing blog about different perspectives on a particular issue or problem in science.

