



# SCIENCE

# 1

FOR FAMILIES

## FIRST GRADE

### What to expect:

In first grade, children are becoming more independent as their reading skills improve and they are able to focus for longer periods of time. Building on skills learned in kindergarten, first-graders are continuing to understand more about the world around them and are active learners who are doing science to learn science. By observing the world, first-graders can come up with possible answers to questions such as “What happens when materials vibrate?”, “What are some ways plants and animals meet their needs so they can survive and grow?”, “How are parents and their offspring alike and different?” and “What objects are in the sky and how do they seem to move?” First-graders will be active learners who are doing science to learn science. For a complete set of science academic standards, [click here](https://sde.ok.gov/oklahoma-academic-standards) or visit [sde.ok.gov/oklahoma-academic-standards](https://sde.ok.gov/oklahoma-academic-standards).

### By the end of the school year, your child will:

- Investigate the relationship between sound and vibration and the connection between light and our ability to see objects.
- Increase their understanding of how plants and animals use the outer parts of their body to help them survive, grow and meet their needs.
- Learn how parents help their offspring survive through adaptation (for example, when a mother animal hears its offspring cry, it provides food) and study how young plants and animals are similar to, but not exactly the same as, their parents.
- Observe, describe and predict patterns in the movement of objects in the sky (the moon, stars, sun, etc.).

### What to do at home:

- Help your child explore the sounds made by everyday objects and instruments, and ask them to identify the different sounds. (Examples of vibrating materials that make sound include a stretched rubber band and a plastic container with a lid.)
- Go on nature walks. Ask your child to describe parts of plants and animals and how they might help them survive. (For example, your child could point out that a rose has sharp thorns that hurt, which might keep an animal from eating them.)
- Go to the zoo or watch videos of baby animals and their parents and describe how they interact. Ask your child how the baby animals and parents look alike and different.
- Observe the sun, moon and stars often and ask your child to describe the differences in their appearance or location from observation to observation.

**YOU ARE** your child's first teacher. Learn how to support the goals of Oklahoma's academic standards and why they are important to your child. Please be in regular communication with your child's teachers and ask how you can support science learning at home. When schools and families work together as partners, it helps your child achieve academic success!



OKLAHOMA  
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### Fostering Curiosity

Children are naturally curious and are motivated to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to nurture curiosity in young children, so be sure to allow plenty of playtime. Encourage your child to ask questions, discover answers and explore their world.

Support your child's curiosity with questions like these:

- What are you interested in knowing more about?
- What else does that make you think of?
- Where do you think we can learn more about these things?

Your child will have plenty of questions. It's okay if you don't always have the answer. The best response is always, "Let's find out together."

### Fostering Communication

Build your child's vocabulary, thinking skills and curiosity by using new words and having conversations that include questions to make your child think. Communicating with others gives children a chance to see and understand that there can be more than one point of view about a given subject. Accepting different ideas helps children learn how to get along with others, encouraging positive relationships with other children and a strong self-image.

Support your child's communication skills with questions like these:

- Who did you play with today? What did you play?
- What was your hardest rule to follow today? Why was it hard?
- What was your favorite part of the day and why?
- Can you tell me an example of kindness you saw and/or showed today?

### Fostering Connections

Making connections between different school subjects helps build your child's overall knowledge and learning. It's also important for your child to make connections between what they are learning at school and in the real world. Point out these connections to your child and encourage them to make them, too.

- Connect science with writing and art by asking your child to draw pictures of the things they see in the world around them (for example, sometimes we see shadows and sometimes we don't, animals live in different places, etc.). Then, ask them to add words and phrases to the picture that describe the things they notice and wonder about and what might cause them or how they work.
- Connect science with engineering by asking your child what they notice and wonder about (for example, "Do you notice that dirt is carried to a new place after it rains a lot?"), then discuss what causes the things they notice, how they work or how they could be modified to work better. (For example, if you asked your child what could help keep the dirt in its place, your child could design and build a structure to hold the dirt in place.)

Join the conversation!

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