

OU 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 vou can support science learning at home. When schools and families work together as partners, it helps your child achieve academic success!

# **SECOND GRADE**

## What to expect:

In second grade, children are beginning to to ask bigger questions as their knowledge of the world grows. Science education plays an important role in language and literacy skill development by exposing students to words connected to classroom observations. In second grade, science education helps children come up with answers to questions like "How does land change, and what things cause it to change?," "How are materials (what something is made of) similar and different from one another, and how do their properties (color, texture, flexibility) relate to how they are used?" and "What do plants need to grow?" This information is a snapshot of learning in science for Grade 2. For a complete set of science academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

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

- Develop an understanding of what plants need to grow and how they depend on animals to move seeds from place to place and for pollination.
- Compare the variety of life in different habitats (locations).
- Develop an understanding of observable properties of materials by studying and classifying different materials. (Investigations could include ice and snow melting or frozen objects thawing.)
- Understand that wind and water can change the shape of the land and compare possible solutions that could slow or prevent such change.
- Use information and models to identify and represent shapes and kinds of landforms (plains, hills, mountains, etc.) and bodies of water.
- Use maps to locate where water is found in liquid and solid ice forms on Earth.

### What to do at home:

- Grow plants in a box garden or in planters and ask your child to discuss the things that will help the plants grow.
- Go on a nature walk and write down the different plants, insects and animals you see. Then go to a different neighborhood or park and write down whether or not the same plants, insects and animals are present.
- Go on a scavenger hunt in the kitchen and ask your child to put all the bowls, utensils, pots and pans in groups based on similarities and differences.
- Notice how things change in the yard after a windy day or a strong rain. Ask your child
  to describe the differences and how the wind or water
  might have caused the change.

# **FOR FAMILIES**

### **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 do you notice and wonder about in your community?
- What new words or new things have you discovered?
- How can you solve the problems you see?

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:

- If you switched places with your teacher tomorrow, what would you teach the class? Why?
- What was the best thing that happened today? What was the worst?
- Did you learn something that challenged you today or was there something you didn't understand?

### **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.)