FOURTH GRADE

What to expect:
In fourth grade, students discover answers to increasingly difficult questions about the world around them. These include: “What are waves, and what do they do?”, “How can water, ice, wind and plants change the land?”, “What features of Earth can you see with maps?”, “How do internal and external parts support plants and animals?”, “What is energy, and how is it related to motion?”, “How is energy transferred?” and “How can energy be used to solve a problem?”

By the end of the school year, your child will:
- Understand how water, ice, wind and plants affect the rate of breakdown in rocks and the movement of rocks from place to place.
- Analyze and interpret data from maps to describe patterns in Earth’s features.
- Use a model to describe patterns of waves and how waves can cause objects to move.
- Develop an understanding of the ways internal and external parts of plants and animals support their survival, growth, behavior and reproduction.
- Develop a model to describe how an object can be seen when light reflected from its surface enters the eye.
- Create an explanation of the relationship between the speed of an object and the energy of that object.
- Understand how energy can be transferred from place to place by sound, light, heat and electric currents or from object to object through collisions.

What to do at home:
- Talk about why it might be harder to see at night or in a dark room compared to in daylight or a brightly lit room.
- Look at different plants growing outside. Discuss parts of the plants that help them grow or survive.
- When you’re driving, ask your child why the windows on one side of the car facing the sun are warmer than the other car windows.
- Toss a ball outside and discuss how to make it go shorter and farther distances.
Fostering Curiosity

Children are naturally curious and want 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 spark curiosity, so be sure to allow plenty of playtime. Encourage your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child’s curiosity with guiding questions like these:

- What kind of material would we use to build a house that could withstand an earthquake?
- What would happen if we dropped a rubber duck or other floating object into a bowl of water?
- What would happen to the land if it rained nonstop for a year?

Your child will have plenty of questions. It’s okay if you don’t have the answer every time. The best response is always, “Let’s find out together.”

Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children’s communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child’s communication skills with questions like these:

- What is the most exciting adventure you could take?
- Who would you take with you on the adventure?
- What was your favorite part of the day and why?
- How did you help someone today?

Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy.

Use the following questions to help fourth-graders understand what they are reading.

**BEFORE READING**

- Skim through the book and chapter titles. What do you think the book will be about?
- How is this book like another one you have read or a movie you have seen?
- What type of book did you choose (fiction, biography, graphic novel, etc.)? Why?

**DURING READING**

- What do you think will happen in the next chapter?
- Who is the main character? Who are the supporting characters?
- What words can I help you understand?

**AFTER READING**

- Could this story take place in today’s world? Why?
- What lesson do you think the author wants the reader to learn? What makes you think that?
- If you were one of the characters in the book, how would you have ended the story? Why?