



## FOCUS AREAS FOR FOURTH GRADE:

- ▶ Understand how weathering and erosion (like blowing wind, flowing water, and moving ice) can break and move rocks and other things.
- ▶ Understand how the different parts of plants (like seeds, leaves, roots, and fruit) and animals (like bones, legs, ears, and eyes) help them grow and survive.
- ▶ Understand how energy moves and changes. Observe energy as light, sound, electricity, or heat: for example, the electrical energy that lights up a bulb when a wire is attached to a battery.
- ▶ Try out the design process like an engineer: for example, plan, develop, test, and improve products to solve specific problems.



## BY THE END OF FOURTH GRADE, STUDENTS CAN:



- ▶ Explain how renewable energy sources (like sun, water, and wind) are different from non-renewable ones (like coal, oil, and nuclear power).
- ▶ Use evidence to show how erosion has changed the local landscape over time
- ▶ Use maps of Earth's continents and oceans to analyze where volcanoes, earthquakes, and mountain ranges form.
- ▶ Compare different ways of protecting people and things from events like floods and blizzards.
- ▶ Explain how energy and the speed of objects are connected. Predict what will happen when two objects run into each other.
- ▶ Show how wave patterns carry energy and can cause objects to move.
- ▶ Compare ways of communicating using patterns, like Morse code.
- ▶ Design a solution to a problem. Test it to see how well it works. Use the test results to improve the design.

## QUESTIONS YOU CAN ASK YOUR CHILD:

- ▶ What are some ways to make sure a flooding river does not damage roads and bridges?
- ▶ How do our eyes allow us to see the world around us?

## TOPICS YOU CAN DISCUSS WITH YOUR CHILD'S TEACHER:

- ▶ Ways of applying what your child learns in science to everyday situations
- ▶ Places in the community that can help your child learn science