

What your child will learn in Grade 5 Science

Matter

Your son will learn how tiny particles make up everything around him. He will investigate solids, liquids, and gases by thinking about how their particles are arranged and how far apart they are. This helps explain why a solid keeps its shape, why a liquid flows, and why a gas spreads out to fill a space. He will measure how much space things take up and how heavy they are, using the language scientists use. [See the curriculum.](#)

Energy

Your son will explore how forces work differently in water and in air. He will test how things move through water and air, and notice that water pushes back harder than air does. He will also investigate how forces affect living things and objects in water and air.

Earth Systems

Your son will learn the difference between weather and climate. Weather is what happens today; climate is the pattern of weather over many years in one place. He will see how climate affects what farmers can grow and when animals move to find food. [See the curriculum.](#)

Living Systems

Your son will look inside living things to understand how they work. He will learn about the systems inside animals and plants, like how your heart pumps blood or how plants take in water through their roots. These systems support vital biological processes. See the curriculum [See the curriculum.](#)

Space

Your son will watch the sky and learn to explain what he sees. He will track how the sun, moon, and stars move, and understand why the seasons change. He will see how the night sky changes through the year. [See the curriculum.](#)

Computer Science

Your son will use design thinking to solve problems. He will plan and build something that works, test it, and improve it based on what he learns. This might be a tool, a game, or a program that does something useful. [See the curriculum.](#)

Scientific Methods

Your son will learn how scientists gather information and use it to answer questions. He will investigate how evidence is gathered and explain the importance of ethics in science. See the curriculum [See the curriculum.](#)

How to help at home: Matter

- **Observe states of matter together.** When you cook, ask your son to watch ice melt into water and water turn to steam. Talk about how the particles are moving differently in each form. [See the curriculum.](#)
- **Measure and compare.** Let him measure the volume of water in different containers and weigh objects on a kitchen scale. Ask him to predict which will be heavier or take up more space. [See the](#)

[curriculum](#).

- **Explore density.** Drop different objects into a glass of water and ask why some sink and some float. This helps him think about how tightly packed the particles are. [See the curriculum](#).

How to help at home: Energy

- **Feel forces in water and air.** Run with him outside on a windy day and talk about how the air pushes against you. Then have him move his hand slowly and quickly through a bathtub to feel how water resists differently. [See the curriculum](#).
- **Investigate forces around your house.** Explore how forces affect objects: how the door opens, how things fall, how water moves. Ask where that energy comes from. [See the curriculum](#).
- **Research energy sources.** Look up wind farms or solar panels online together and talk about how they work and what makes them useful. [See the curriculum](#).

How to help at home: Earth Systems

- **Notice the seasons.** Talk about what you see outside each month. Ask your son what plants and animals do in winter versus summer, and why. [See the curriculum](#).
- **Track the weather.** Keep a simple chart of the temperature and rain each day for a month. Then talk about the difference between that daily weather and the climate where you live. [See the curriculum](#).
- **Visit a garden or farm.** If you can, ask the gardener or farmer what they grow and when. Talk about how the climate of your area decides what can grow. [See the curriculum](#).

How to help at home: Living Systems

- **Trace a system.** Ask your son to follow what happens to food after he eats it. Talk about his digestive system and how it breaks food down so his body can use it. [See the curriculum](#).
- **Observe plants.** Grow a bean or herb in a cup of soil and water. Watch the roots grow down and the stem grow up. Talk about how the plant's systems help it survive. [See the curriculum](#).
- **Feel your own systems.** Have him put his hand on his chest and feel his heartbeat. Talk about why his heart beats faster when he runs and slower when he rests. [See the curriculum](#).

How to help at home: Space

- **Go stargazing.** On a clear night, step outside and look at the stars together. Ask your son to point out any patterns he sees or bright stars he recognizes. [See the curriculum](#).
- **Track the moon.** Look at the moon each night for two weeks and draw what it looks like. Talk about why it changes shape. [See the curriculum](#).
- **Notice the sun's path.** Over a few weeks, watch where the sun rises and sets. Talk about how it moves across the sky differently in summer and winter. [See the curriculum](#).

How to help at home: Computer Science

- **Build and test.** Help your son design a simple tool or toy, build it from craft materials, and test whether it works. Ask him what he would change to make it better. [See the curriculum](#).
- **Write instructions.** Ask him to write down the steps to do something he knows well, like making a sandwich or playing a game. Then have him test the instructions by asking someone else to follow them and see if they work. [See the curriculum](#).
- **Play a coding game.** Use a free block-based coding app online where he can drag blocks to make a character move. Talk about how the blocks are like giving instructions. [See the curriculum](#).

How to help at home: Scientific Methods

- **Ask questions together.** When your son is curious about something, help him turn it into a question he can test: "Does a heavier ball bounce higher?" or "Do plants grow faster in sunlight or shade?". [See the curriculum.](#)
- **Gather evidence carefully.** When he does a test, ask him to measure or count the same way each time so the answer is fair. [See the curriculum.](#)
- **Talk about honesty.** If his test does not turn out the way he expected, celebrate it. Explain that scientists learn from surprises, and that writing down what really happened is more important than getting the "right" answer. [See the curriculum.](#)