

What Your Child Will Learn in Grade 5 Science

Matter

This year, your child explores what everything around us is made of, right down to the tiny particles too small to see. They will use this particle idea to explain why ice is solid, water is a liquid, and steam is a gas, and to understand what happens to those particles when matter changes from one form to another. [See the curriculum.](#)

Energy

Your child will compare how pushes and pulls work differently in water and in air. They might test how a paper airplane moves through the air versus how a toy boat moves through water, and think about how these forces affect both living things and objects. [See the curriculum.](#)

Your child will also look at different sources of energy, such as wind, sun, and fossil fuels, and think about how each one is used and where it comes. [See the curriculum.](#)

Earth Systems

Your child will study climate patterns and connect them to the weather we experience day to day. They will also look at how climate affects farming practices in different places. [See the curriculum.](#)

Living Systems

Your child will investigate the systems inside living things, such as how the body moves food, air, or blood through it. They will explain how these systems support the vital processes that keep an organism alive and working. [See the curriculum.](#)

Space

Your child will observe and think about events in the sky, such as the phases of the moon or the positions of stars and planets, and try to explain the patterns they notice. [See the curriculum.](#)

Computer Science

Your child will use a design process to create something meant to solve a problem, whether that is a simple program or a physical object built for a person or a machine to use. [See the curriculum.](#)

Scientific Methods

Your child will learn how scientists gather evidence to answer questions, and talk about why fairness and honesty, doing science the right way, matter when collecting that evidence. [See the curriculum.](#)

How to help at home

Matter

- Freeze water into ice, then let it melt, and boil water safely on the stove to watch it turn to steam. Talk about what happens to the tiny particles as the water heats up and cools down. [See the curriculum.](#)
- Fill a glass with water and a balloon with air, and ask your child to guess which one has more mass, then check with a kitchen scale. [See the curriculum:](#) [1](#), [2](#).

- Pour the same amount of water into containers of different shapes to show that the volume of a liquid stays the same even when its shape changes. [See the curriculum: 1, 2.](#)

Energy

- Fly a paper airplane, then drop the same airplane into a filled sink or bathtub, and talk about how it moves differently through air and through water. [See the curriculum.](#)
- Shoot a toy arrow or foam dart and talk about the forces pushing and pulling on it as it flies. [See the curriculum: 1, 2.](#)
- Take a walk around your neighborhood and spot different energy sources, such as solar panels, power lines, or a windmill, and talk about where that energy comes. [See the curriculum.](#)
- Build a simple wind turbine kit together, if you have one, and test how changing the blade shape changes how well it spins. [See the curriculum: 1, 2.](#)

Earth Systems

- Check the weather forecast together for a week and talk about how it connects to the season and the climate where you live. [See the curriculum.](#)
- Visit a farmers market, farm, or garden and ask how the weather and climate affect what grows there. [See the curriculum.](#)

Living Systems

- After your child runs around or exercises, have them feel their heartbeat and breathing, and talk about how the body moves blood and air to keep working. [See the curriculum.](#)
- Look at a picture of the human body together and talk about how systems such as digestion or circulation each play a part in keeping the body running. [See the curriculum.](#)

Space

- Track the moon's shape on a calendar every few nights and talk about the pattern it forms over about a month. [See the curriculum.](#)
- On a clear night, go outside and look for stars or planets, and ask your child what patterns they notice in the sky. [See the curriculum.](#)
- Read together about how farmers or hunters use the sun, moon, or seasons to plan their work, and talk about why that kind of observation matters. [See the curriculum: 1, 2.](#)

Computer Science

- Build something at home out of household materials to solve a small problem, and ask your child to walk you through the steps they took to design it. [See the curriculum.](#)
- Try a simple block-based coding game together and talk about how each block works like one instruction in a set of steps. [See the curriculum: 1, 2.](#)

Scientific Methods

- When your child makes a claim about something, ask "how do you know?" and talk together about what evidence would help answer the question. [See the curriculum.](#)
- Talk about why it matters to be honest and careful when doing an experiment, even when the results are not what you expected. [See the curriculum.](#)