

What your child will learn in Grade 5 Science

Matter

This year your son will explore how things are made of tiny particles that move and behave differently depending on whether something is a solid, liquid, or gas. He will investigate the particle model of matter by looking at physical properties like how much space something takes up (volume) and how heavy it is (mass). Understanding particles helps explain why ice melts into water, why water turns to steam, and why air fills any container you put it. [See the curriculum](#).

Energy

Your son will study forces and how they work in different places. He will investigate how forces affect living things and objects when they move through water and air. He will also explore different energy resources like wind, sun, and fossil fuels, learning where energy comes from and how we use it to power our homes and machines. [See the curriculum](#): [1](#), [2](#).

Earth Systems

Your son will learn about climate and how it shapes where we live and what we grow. He will analyze the difference between climate (the weather pattern over many years in one place) and weather (what happens on a particular day), and he will connect climate to farming practices, such as when farmers plant crops based on seasonal changes. [See the curriculum](#).

Living Systems

Your son will investigate the internal systems of living things, such as the digestive system, circulatory system, and respiratory system. He will learn how these systems work together to keep organisms alive and healthy, and he will understand why each system does its job. [See the curriculum](#).

Space

Your son will observe and interpret astronomical phenomena, such as moon phases, eclipses, and auroras. He will learn to recognize patterns like moon phases and seasonal changes, and he will understand how these patterns affect life on Earth. [See the curriculum](#).

Computer Science

Your son will use design thinking to solve problems and create things. He will apply a design process when building or coding something that solves a real problem, whether it is a physical object or a set of instructions a computer can follow. [See the curriculum](#).

Scientific Methods

Your son will learn how scientists gather evidence and use it to answer questions about the world. He will understand why it is important to be fair and honest when doing science, and he will see how evidence leads to real understanding. [See the curriculum](#).

How to help at home

Matter

Ask your son to predict what will happen when you freeze juice or boil water together with adult supervision, then watch it together and talk about why the particles behaved that way. Be sure to keep him away from hot water and steam to stay safe. Measure the volume of water in a cup, then pour it into a tall glass and ask him whether the amount changed (it did not, but the shape did). Weigh different objects on a kitchen scale and compare their mass to help him investigate the particle model of matter in relation to physical properties [See the curriculum](#).

Energy

Play catch or throw a ball into water and ask your son why the ball slows down differently in each place. Build a simple pinwheel or paper airplane and experiment with how hard you need to throw it to make it go far, talking about the force your arm provides. Look at your home's energy sources together: the sun on the roof, the gas or electric meter, or a wind turbine in your neighbourhood, and discuss where the energy comes. [See the curriculum: 1, 2](#).

Earth Systems

Talk about the seasons and why we plant gardens in spring but not winter. Look at a weather forecast together and ask your son to predict what the weather will be like next week based on patterns he has noticed. Visit a local farm or farmers' market and ask the farmer why certain crops grow at certain times of year. [See the curriculum](#).

Living Systems

Ask your son to trace his own digestive system by eating a snack and describing where the food goes and what happens to it. Feel his pulse on his wrist and talk about his heart pumping blood around his body. Watch him breathe deeply and ask him where the air goes and why his body needs it. [See the curriculum](#).

Space

Go outside on a clear night and look for the moon together, noticing its shape and position. Keep a simple chart of what the moon looks like each night for a month so your son can see the pattern of moon phases. On a sunny day, notice shadows and talk about how the sun's position changes throughout the day and year. [See the curriculum](#).

Computer Science

Give your son a simple task, like making a sandwich, and ask him to write down every single step in order so someone else could follow it perfectly. Try following his instructions exactly as written to see where he needs to be more clear. Use free block-based coding games online where he can drag and drop instructions to make a character move. [See the curriculum](#).

Scientific Methods

When your son asks a question about how something works, help him design a fair test to find the answer. For example, if he wonders whether plants grow faster in sunlight or shade, set up two plants and measure them each week. Talk about why it is important to keep everything the same except the one thing you are testing, and why writing down what you see is more reliable than just remembering. [See the curriculum](#).