

Wyoming Public Schools 5th Grade Science Essential Standards

Science Essential Standard	Student Friendly Language	Family Friendly Language
5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.	I can show that all matter is made of tiny particles too small to see.	Your child is learning that everything around us is made of matter, and matter is made of tiny particles so small they cannot be seen without special tools.
5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.	I can measure and graph to show that no matter how something changes when it's heated, cooled, or mixed, its total weight stays the same.	Your child is learning to measure and graph results to show that when substances are heated, cooled, or mixed, the total amount of matter (weight) stays the same, even if its form changes.
5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	I can investigate to see if mixing substances makes something new.	Your child is learning to test and observe whether mixing two or more substances creates a new substance with different properties.
5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.	I can show that the energy animals get from food originally came from the sun.	Your child is learning that the energy animals use for moving, growing, staying warm, and repairing their bodies comes from the food they eat — and that this energy originally started with the sun.
5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact in Michigan and the Great Lakes basin.	I can show how land, water, air, and living things in Michigan and the Great Lakes area affect each other.	Your child is learning how Michigan's land, water, air, and living things interact with each other.
5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.	I can explain that Earth's gravity pulls things down toward the ground.	Your child is learning that Earth's gravity is a force that always pulls objects straight down toward the center of the Earth.
3-5 ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	I can describe a simple problem we need to solve, what will make it successful, and any limits on materials, time, or cost.	Your child is learning to identify a simple problem that meets a need or want, decide what success looks like, and consider limits such as materials, time, or cost.
3-5 ETS1-2 Generate and	I can come up with different	Your child is learning to think of

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compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	solutions to a problem and compare them to see which one works best with the given limits.	several possible solutions to a problem and compare them to find the one that best meets the goals while staying within limits like materials, time, or cost.
3-5 ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	I can test my design fairly by changing only one thing at a time, watching for problems, and finding ways to make it better.	Your child is learning to run fair tests on a model or prototype by controlling variables, looking for weak points, and figuring out how to improve the design.