



Science Unlocked Scope & Sequence Wonder (Grades K-2)

A PRODUCT OF HOME SCIENCE TOOLS



Choose Your Full-Year
Science Curriculum Bundle

Earth & Space	Physics	Chemistry	Biology
Go with the Flow Build and test dams and watersheds to learn how animals and people impact the environment by changing the flow of water. K-ESS3-1 K-ESS2-2 K-ESS3-3	Blast Off! Test how pushes and pulls change the speed or direction of a moving object and design a space probe model. K-PS2-1 K-PS2-2 K-2-ETS1-1 K-2-ETS1-3	Parts in Place Make a toy car with working headlights, and build a bridge while learning about the smallest pieces of matter. 2-PS1-1 2-PS1-2 2-PS1-3	Keys to Life Sprout seeds, dissect an owl pellet, and build animal homes. K-LS1-1 2-LS2-1
Weather Watch Engage with the outdoor adventures and indoor experiments to understand the weather all around you! K-ESS2-1 K-ESS3-2 2-ESS2-3	The Sun Blocker Make art using the sun, learn why the sun is important to Earth, and design a sun blocking device to protect your candy K-PS3-1 K-PS3-2	Brick by Brick Properties and Purposes of Building Materials Build a solid chemistry foundation 2-PS1-2 2-PS1-3	Penguin Parenting Learn about penguin parenting and the reasons penguins will risk their lives to provide for and raise their offspring. 1-LS1-2 1-LS3-1
See You Around Model the movements of the Earth and Moon around the Sun, moon phases, seasons, and more. 1-ESS1-1 1-ESS1-2	A-Maze-Ing Mirrors Investigate the world of light and discover what happens when it hits different objects! 1-PS4-2 1-PS4-3 1-PS4-4	Hot and Cold Make a thermometer and use it to measure the effects of various conditions on temperature. K-PS3-1 2-PS1-4	From Brrr to Burrow Discover the amazing ways animals stay warm! 1-LS1-1 2-LS4-1
Not-So-Solid Ground Learn how Earth's surface features are changed by natural and human-caused events. 2-ESS1-1 2-ESS2-1 2-ESS2-2	That's a Sound Idea You'll be cheering with delight when you do these hands-on experiments about sound and vibration. 2-PS1-2 2-PS1-3	Squishy Science Observe physical properties of materials to design a stress ball K-2-ETS1-3 2-PS1-1 2-PS1-2	Super Seeds Develop models demonstrating how multiple animals cause pollination and seed dispersal. 2-LS4-1 2-LS2-2



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The Dark Side Test patterns in the night sky and on Earth to learn about some of our closest celestial bodies, including the Earth. 5-ESS1-1 5-ESS1-2 MS-ESS1-1	Funny Forces Experiment with air pressure, discover simple machines in everyday items. 3-5-ETS1-2 3-PS2-1 3-PS2-2 5-PS2-1	Warm and Bright Explore thermal energy. MS-PS1-4 MS-PS3-3 MS-PS3-4	How's it Growin' Design and conduct investigations to discover the world of plant growth. 3-LS4-3 5-LS1-1 MS-LS1-6
Feeling the Pressure Experiment with temperature and pressure to develop your understanding of weather and how to predict it. 3-ESS2-1 MS-ESS2-5 MS-ESS2-6	Power of Magnets Get hands-on with magnets to find out what they can do and how they do it. 3-PS2-3 3-PS2-4 MS-PS2-3 MS-PS2-5	Energy to Burn Explore the changes involved in storing and releasing energy from food. MS-LS1-7 MS-PS1-1 MS-PS1-6	Eye Spy Open your eyes to the unique traits that make species perfectly suited to survive in their habitats 3-LS3-1 3-LS3-2 3-LS4-1 3-LS4-2
Hazards and Humans Discover climate connections to understand how humans predict and prevent damage from natural hazards. 3-ESS2-2 3-ESS3-1 4-ESS3-2 MS-ESS3-2	Controlling Collisions Learn how the structure of design impact the ability to withstand collisions. 3-5-ETS1-2 3-5-ETS1-3 4-PS3-1 4-PS3-3 4-PS3-4 MS-PS3-1 MS-PS3-5	Fizz, Foam, Fire Perform chemical reactions to find evidence for chemical change, use clues to describe reactants and products. 5-PS1-4 MS-PS1-2	Seeking Survival Simulate and study the relationships species have in the wild! 3-LS2-1 3-LS4-4 MS-LS1-4
Raining on our Parade Test how pH affects the degradation of both the land and sea with living and non-living materials. 4-ESS3-1 5-ESS3-1 MS-ESS3-3 MS-ESS3-4	Wave Wisdom Learn what waves are, how people use them by doing some wavy water tricks. 4-PS4-1 4-PS4-3 MS-PS4-1 MS-PS4-2	Contain Your Excitement Learn how mass is conserved when matter changes during physical change. 5-PS1-2 5-PS1-4 MS-PS1-2 MS-PS1-5	Hungry for Change Discover an amazing insect that can break down plastics on our planet! 3-LS1-1 MS-LS2-3 MS-LS2-4
Rocks and Resources Learn about how rocks are formed, where they come from, and Earth's natural resources. MS-ESS3-1	The Light Trap Investigate light's role in energy transfer and sight, and find out how pigments connect science and art. 4-PS3-2 4-PS4-2 5-PS1-1 MS-PS1-3	Water: Weird and Wonderful Discover what water can do, and find out how molecular structure determines its unique properties. 5-PS1-1 5-PS1-3 MS-PS1-1	Making Sense of Senses Discover how the brain processes your senses which allows you to experience the world 4-LS1-1 4-LS1-2 MS-LS1-8
Beneath our Feet Examine fossils in layers of rock, modeling tectonic plates, and making mountains 4-ESS1-1 4-ESS2-2 MS-ESS2-3	No Wires Necessary Investigate the conductivity of materials, test circuits, and design a model circuit of a home. 4-PS3-2 4-PS3-4 MS-ETS1-2	Mega Molecules Master the macromolecules required to survive MS-PS1-2 MS-PS1-3 MS-LS1-7	Magnificent Magnification Look into the microscopic world by creating your own slides, and explore the smaller side of life. MS-LS1-1 MS-LS1-2 MS-LS1-3



Science Unlocked Scope & Sequence Launch (Grades 8-12)

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Earth & Space	Physics	Chemistry	Biology
Danger Zone Climate change connects people and living things around the world. MS-ESS3-5 HS-ESS2-4 HS-ESS3-5	Transformers Energy can't be created or destroyed. Design, build, and test devices to convert it from one form to another! HS-ETS1-3 HS-PS3-1 HS-PS3-3 HS-PS3-5	Rate of Reactions Experiment with making chemical reactions happen at different speeds! HS-PS1-5 HS-PS1-6	Ancient Organisms Discover the intricacies of fossils and learn how they are used to understand ancient and modern organisms. MS-LS4-1 MS-LS4-2 MS-LS4-3 HS-LS4-1
Working with Watersheds Model the relationships between humans, watersheds, and natural resources. HS-ESS3-3 HS-ESS3-4 HS-ESS3-6	Magnetize Me Perform investigations involving magnetism and electricity to learn how magnetic force, voltage, current, and resistance are connected. MS-PS2-3 MS-PS2-5 HS-PS2-5	Naturally Nuclear Use models of radioactive decay to learn about natural and human-made nuclear reactors. HS-PS1-4 HS-PS1-8	Game of Survival Play the survival game detailing natural selection and explore examples from each class of animals. MS-LS4-4 MS-LS4-6 HS-LS4-3 HS-LS4-4 HS-LS4-5
Going in Circles Follow carbon through the carbon cycle, water cycle, nitrogen cycle, phosphorus cycle, and rock cycle. MS-ESS2-1 HS-ESS2-6	UV Defenders Engage in memorable physics activities using UV color changing beads. HS-PS3-2 HS-PS4-1 HS-PS4-3 HS-PS4-4	Reaction Rainbow Make a reaction rainbow to study reactions of acids and bases, and solve problems related to pH of solutions. HS-PS1-3	Unintended Consequences Build, grind, and wash away dirt and rocks to discover the fascinating effects of erosion and weathering. MS-LS2-5 HS-LS2-1 HS-LS2-2 HS-LS2-7 HS-LS4-6
Reducing Reliance on Rarity Work through the processes of uncovering and using materials to make a smartphone. HS-ESS3-1 HS-ESS3-2	Trick of the Light Uncover the secrets of refraction and reflection by making your own optical illusions, and comparing digital and analog transmissions. HS-PS4-2 MS-PS4-3 HS-PS4-5	Super Cool Discover the relationship between crystalline structure and phase changes with Super Cool! HS-PS3-4	Breathing Without Air Learn how energy and matter cycle through organisms during respiration, with and without oxygen. HS-LS1-7 HS-LS2-3 HS-LS2-4 HS-LS2-5
Reading the Rocks Learn how geologists decipher the clues hidden in rock layers, get hands-on with how those layers form. MS-ESS1-4 HS-ESS1-6 HS-ESS2-7	Newton's Notions Get hands-on with Newton's three laws of motion, exploring concepts like inertia, acceleration, and reaction forces. MS-PS2-1 MS-PS2-2 HS-PS2-1 HS-PS2-2	The Material World Learn how physical properties are determined by particle-level chemical structures. HS-PS2-6	Revenge of the Synth Connect biological structures to the chemical processes of photosynthesis and uncover unusual organisms that photosynthesize. HS-LS1-5 HS-LS1-6



Science Unlocked Scope & Sequence Launch – Continued

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Earth & Space	Physics	Chemistry	Biology
Unusual Structures Build, grind, and wash away dirt and rocks to discover the fascinating effects of erosion and weathering. MS-ESS2-2 HS-ESS2-2 HS-ESS2-5	Project Projectile Hit the mark with this physics kit that aims to help students understand the laws of one-dimensional and two-dimensional motion. HS-PS2-1	Salty States Investigate to determine the effect of salt on phase changes and observe interactions between molecules. HS-PS1-3	Chasing Equilibrium Conduct a series of hands-on activities to learn the details of the mechanisms that keep your body regulated. HS-LS1-2 HS-LS1-3
Restless Rocks Use models of Earth's interior and the ocean floor to explore how earthquakes, volcanoes, and island formation are connected. HS-ESS1-5 HS-ESS2-1	Gravity of the Situation Explore how objects in space stay in orbit, how they could escape orbit, and how the force of gravity is related to the forces within atoms. MS-PS2-4 MS-PS3-2 HS-PS2-4	Good to Glow Explore the connections between the properties of unique elements, chemical bonding, and chemical reactions. HS-PS1-1 HS-PS1-2	Cats and Chromosomes Uncover the mystery of Hemingway's six-toed cats while diving into organism genetics. MS-LS1-5 MS-LS3-2 MS-LS4-5 HS-LS1-4
Searching the skies Uncover the secrets of the Solar System by using ancient calendars and observations of planets, stars, and more MS-ESS1-2 MS-ESS1-2 HS-ESS1-4	In Perfect Harmony Learn about the natural patterns of harmonic motion by exploring springs, pendulums, and more. HS-ESS1-4	The Mighty Mole Inflate balloons, hydrate silica, and chew bubblegum to learn to convert between moles, mass, and particles with ease! HS-PS1-7	Crack the Code A mystery can be solved with the right tools. Become immersed in genetics and DNA to solve a disease mystery. MS-LS3-1 HS-LS1-1 HS-LS3-1 HS-LS3-2
Secret Lives of Stars Use magnetism to affect electricity, make star property graphs, view colorful spectra. HS-ESS1-1 HS-ESS1-2 HS-ESS1-3	Martian Impact Learn how measurements and conversions help scientists and engineers design technological solutions to problems in physics. HS-PS2-3	Atoms and Angles Explore the forces within and among molecules that determine structure and chemical behavior. HS-PS1-3	Flashy Feathers Play a game, investigate seeds, grow plants, and raise an ant farm to discover heritable traits. MS-LS2-2 HS-LS2-8 HS-LS3-3 HS-LS4-2



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