

Foundations of Inquiry Science

Accelerated Pace: Semester 1 Supply List

Week 1A — Organizing Things into Categories	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> Paper and pencil OR Writing Sheet for Memory Game 	<ul style="list-style-type: none"> Categorizing Monsters worksheet Assortment of miscellaneous items from junk drawers and closets (for sorting practice)
Week 1B — Solids, Liquids, and Gases Introduction	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> Solid, Liquid, Gas Sorting worksheet Writing Pages Water and various liquids in clear containers (cooking oil, liquid detergent, syrup, shampoo, etc.) Various solid items (toys, pencils, dishes, coins, etc.)
Week 2A — States of Matter: Changes with Temperature	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> No additional supplies needed (uses same materials from Week 1B) 	
Week 2B — Gravity Introduction	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> Something to drop (literally anything that isn't going to break) Clear bottle or cup with water in it Some type of oil (vegetable oil works well) 	
Week 3A — The Concepts of Horizontal and Vertical	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> Blocks or something to stack that can fall without breaking 	<ul style="list-style-type: none"> Plumb bob (any weight tied to the end of a string) Carpenter's level Horizontal and Vertical Printable
Week 3B — What is Energy?	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> Sorting Energy worksheet Energy Transfers worksheet
Week 4A — Energy Transformation	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> No additional supplies needed (same worksheets from Week 3B) 	
Week 4B — Air is Real / Air and the Atmosphere	
Required Items	Optional Items / At Home Demonstration

<ul style="list-style-type: none"> • Balance scale • Bubbles • Straw • Cup of water • Fan • Balloon (2) • Bowl of water big enough to stick your hand in 	<ul style="list-style-type: none"> • Alternative to balance scale: stick/dowel balanced on a string OR a hanger
Week 5A — Categorizing the World Around Us	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Biological, natural Earth, and human-made sorting worksheet
Week 5B — Distinguishing Living Things from Natural Earth and Human Made / Technology, Tools, and Animals	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Fine Details + Magnifying Glass
Week 6A — Matter is Made of Particles	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Draw Particles Worksheet or paper to draw on • Piece of paper to rip up 	
Week 6B — Changes in Particles with States of Matter / Reversible and Nonreversible Changes	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Diffusion Experiment: food coloring, hot water, cold water, room temperature water, three clear glasses
Week 7A — Sound and Vibrations	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Soundwaves Printable or paper • Rubber bands (1 larger flat rubber band, 2 smaller, various other sizes helpful) • Two JUMBO popsicle sticks (the wider ones) • Plastic straw + scissors to cut it 	<ul style="list-style-type: none"> • Slinky • Stringed instrument, xylophone, bell, or other tone-making item • Tuning fork (especially useful but not required)
Week 7B — How Sound Travels	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • No additional supplies needed (uses same materials from Week 7A) 	
Week 8A — Kinetic and Potential Energy / Energy in the Natural World	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Ramp (any flat surface on an angle, a book balanced on other books works) • Balls or toys to roll or slide down the ramp 	<ul style="list-style-type: none"> • Pendulum (a weight on a string tied to the edge of a table) • Balloon • Rubber bands • Spring-powered or windup toy

Week 8B — Plants vs. Animals: Key Differences / Where All Food Energy Comes From	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Food Web Worksheet • Plant versus Animal Sorting worksheet
Week 9A — Categories of Materials / Properties of Different Materials	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Wood pencil • Various materials to feel and touch (metal, plastic, wood, ceramic) • Examples of something translucent, transparent, and opaque • Magnet
Week 9B — The Life Cycle Concept	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Lifecycle Worksheets (various)
Week 10A — Metamorphosis and Variation in Life Cycles	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Depending on the season, an animal to raise to observe its lifecycle (butterfly, ladybug, fruit fly, frog, etc.) — make sure it is a local species and not invasive
Week 10B — Understanding Force / How Force and Energy Work Together	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Items to toss safely (balls, bean bags, etc.) 	<ul style="list-style-type: none"> • Spring scale
Week 11A — Animal Adaptations / Food Chains and Energy Flow	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Food Chain Activity worksheet or blank paper to draw/write a food chain 	
Week 11B — Reading and Drawing Maps	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Blank Map or blank paper • Drawing supplies • Pencils or markers 	<ul style="list-style-type: none"> • Maps of your local street area • Maps of your larger city or region
Week 12A — Matter vs. Energy: What Is the Difference?	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Bathroom or accurate scale or balance • A lamp, heater, or springs and rubber bands (to illustrate forms of kinetic energy)
Week 12B — Identifying Local Plants and Animals / Habitats and Why Organisms Live Where They Do	
Required Items	Optional Items / At Home Demonstration

	<ul style="list-style-type: none"> • Field guides for regional trees, flowers, mammals, birds, and insects (used copies are fine) • Seek App on phone • Materials for making simple leaf or insect collections (as desired)
Week 13A — Air Pressure	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Balloon • Clear cup of water and straw 	
Week 13B — Pressure Inside and Outside / Vacuums and Suction / Air Pressure, Wind, and the Atmosphere	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Household vacuum cleaner
Week 14A — Day, Night, and Earth’s Rotation	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Globe on a small table or stand + flashlight or lamp with no shade • Toothpaste and rice grains OR a sticky note
Week 14B — Compass Directions / Maps and Real-World Directions	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Compass Rose Printable OR blank paper • North South East and West Printable OR paper with grid lines (4x4 and 8x8) • Cheap plastic globe (dollar store) that you can cut up OR an orange with the continent shapes drawn on it 	<ul style="list-style-type: none"> • Globe • World map • Compass (or phone compass app) • Stick or pole mounted to the ground with a way to mark the ground
Week 15A — Properties of Magnets	
Required Items	Optional Items / At Home Demonstration
<ul style="list-style-type: none"> • Bar magnet (2 or more, one to be suspended by thread) • Things to test for magnetism (whatever you have on hand) • Iron or iron-containing items (paper clips, small nails, pipecleaners, etc.) • Non-iron metal items (aluminum soda cans, pennies, silver or gold jewelry, lead fishing weight) 	<ul style="list-style-type: none"> • Variety of magnets (horseshoe, bar, and button types) • Directional compass
Week 15B — Magnetic Fields / Earth as a Magnet	
Required Items	Optional Items / At Home Demonstration
	<ul style="list-style-type: none"> • Iron filings (purchasable or sometimes free from a local machine shop) • This set from Amazon is really helpful for more investigations • This set is higher quality and NOT from Amazon, but only includes one bar magnet • Dollar Tree sometimes has magnets for sale

