



List of Discovery Box Kits

- **States of Matter - Grades 3-5**
Solids Under Pressure- 45 min.: There are more ways to melt an ice cube than using just heat in this module about the effects of pressure on solids.
Solids and Liquids- 45 min.: Explore the ways solids and liquids interact and see how those interactions change when you change the liquid.
Volcano in a Bottle- 45 min.: Using the knowledge about matter gained from the first two modules, students will make a model volcano and learn about the states of matter.
- **Volume/Mass/Density – Grades 3-5**
Sink or Swim?- 45 min.: Explore various objects and materials, Examine their properties and determine if they will sink or float.
Measuring with a Hydrometer- 45 min.: Discover how a hydrometer works and its various applications.
Salty of Sweet- 45 min.: Will the addition of sugar or salt effect the relative density of water? Find out in this module.
- **Oceans- Grades 3-5**
Turtle Hurdles – 60min.: Examine the life and challenges of a Sea Turtle in this fun and informative activity.
Let’s Make Waves – 45 min.: Explore and understand the nature, behavior and origin of waves.
Ocean in a Bottle – 30 min.: See the effects of pollution on a grand scale in something you hold in your hands.
- **Minerals- Grades 3-5**
Growing Crystals- 30 min. to start +5 days of Observation: See how to grow crystals and document their growth in this activity.
- **Astronomy/Space – Grades 3-5**
What Happens in a Vacuum? – 30 min.: See the challenges that are caused by the vacuum of outer space.
Surface of the Moon – 30 min.: Understand our closest celestial neighbor by observing the unique features of its face.

Insulators -60 min.: Understand what makes a good insulator, and why insulators are essential to human space exploration.

Balloon Rockets – 45 min.: See the principles of rocketry, and how changes affect their trajectories.

- **Plants – Grades 4-5**

Why do Leaves Change Color in the Fall? – 90 min.: See the importance of photosynthesis, and how the chemicals that make it possible also have dramatic changes on leaf colors.

Plant Growth Development – 2 weeks for observation: See how a plant behaves when its light source comes from an angle other than directly above the plant.

- **Force of Friction – Grades 3-5**

Friction on a Ramp – 90 min.: Explore what the effects of different materials have on a toy car sent down a ramp in this fun physics module.

- **Rocks and Minerals – Grades 3-5**

Rock Layers of the Earth – 90 min.: Examine the differences in rocks and minerals as you journey to the center of the Earth.

Testing for Limestone – 3 days (15-30 min. each): Using various methods, determine if a given sample contains limestone.

Growing Crystals- 30 min. to start +5 days of Observation: See how to grow crystals and document their growth in this activity.

- **Electricity – Grades 4-5**

Homemade Battery – 45 min.: Understand the components and function of a battery as you build your own!

- **Properties of Water –Grades 3-5**

The H₂Olympics – 60 min.: Explore the concepts of cohesion and adhesion while you compete in 5 events.

Density of Water – 30 min.: Examine the density of water and how it influences other materials interaction with water.

- **Erosion – Grades 3-5**

Water Erosion – 45min.: See the effects of water erosion firsthand as this module sweeps you away.

Wind Erosion – 45 min.: Discover how land masses migrate on the breeze, and the adverse effects that have surfaced in the past.

Glacial Erosion – 45 min.: Explore how these icy giants have shaped, and continue to shape our landscape.

- **Ecosystem in a Bottle – Grades 3-5**
Ecosystem in a Bottle – 45 min. to construct, 3-4 weeks for observation: Witness the interactions and relationships of different organisms in an ecosystem you hold in your hand.
- **Magnetism – Grades 3-6**
Comparing Strengths of Magnets – 30 min.: See which magnet is stronger in this quick lab.
Field Blockers – 60 min.: Examine materials to see if they are suitable to block magnetic fields.
Magnetic Field Lines – 30 min.: Witness the magnetic fields emitted by magnets,
Making Magnets – 45 min.: Explore how ordinary metals can undergo changes that turn them into magnets.
Make a Compass – 45 min.: Use the magnetic field of the Earth as a guide when you construct a compass.
- **Optical Science – Grades 3-5**
Are Two Eyes Better Than One? – 10 min.: See how important binocular vision is to human functioning.
Optical Illusions – 20 min.: Explore how many optical illusions work and see how they fool the eye.
Looking Through Lenses – 15 min.: Witness the range of effects caused by different lens types.