SUNCOAST SCIENCE CENTER
Faulhaber Fab Lab

LENDING LIBRARY

Materials for Loan

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Bio/Life Science Materials:

Kit Name:	Suggested Grade Level:	Description:
Classification	4-8	Students use a large set of photo cards to explore the way living organisms are classified according to their characteristics.
Genetic Corn	6-12	Student use corn samples to study patterns and ratios of Mendelian genetics.
Mendelian Genetics	6-12	Students complete a series of activities with tokens that demonstrate how probability influences genetic outcomes.
Plant and Animal Cell	6-12	Students compare features of plant and animal cells using large cell models and prepared microscope slides. (This kit comes with 1 Brock Magiscope - additional microscopes are available for loan if needed.)
Plant Maze	3-5	Students use a specialized set of materials to conduct an experiment to discover how plant respond to stimuli such as heat, light, and gravity.
Turtle Trunk – Traveling Turtles	3-8	This kit contains multiple games and activities all related to sea turtle natural history and conservation.
Turtle Trunk – Dark Skies, Dark Beaches	5-12	This kit contains multiple activities related to sea turtle biology and behavior, as well as activities related to light and electricity.
Energy House	3-5	Students build a model house powered by a solar cell to explore energy efficiency, transfer, and conversion.
Hydroponics	2-4	Students observe plants growing in a hydroponic system (kit includes seeds, plant food and equipment)
Dynamic DNA	6-8	Students learn about the structure of DNA by building a model using a specially modified K'nex set.

Earth and Space Science Materials:

Kit Name:	Suggested Grade Level:	Description:
Florida's Natural Resources	3-5	Students explore examples of a variety of Florida's natural resources and determine if they are renewable or non-renewable.
Planets	6-8	The kit contains a series of 10 lab stations taking students through a study of the objects in the Solar System. Also contains a DVD for viewing (teachers without access to a DVD player may request one for loan along with the kit)
Planetary Shuffle Inflatable Solar System	K-3	Students learn about the characteristics, order, and distance of the planets as they walk a scaled model of the solar system complete with inflatable planets.
Rotation and Revolution	3-5	The kit contains a hands-on exploration to help students understand how the sun, Earth, Moon, and stars move in space and in relation to each other.
Weather Forecasting	6-8	The kit contains a series of 11 stations at which students explore the physical processes that create weather. Also contains a DVD for viewing (teachers without access to a DVD player may request one for loan along with the kit)
Our Star and Outer Space	6-8	The kit contains a series of 12 stations at which students explore the variety of objects in the solar system and outer space. Also contains a DVD for viewing (teachers without access to a DVD player may request one for loan along with the kit)
Tectonic Sandbox	4-8	A buildable model that shows how layers of the earth are affected by the movement of tectonic plates.
Rockin' Geology	4-8	Students use rock samples and testing kits to explore the three main types of rock, the difference between rocks and minerals, and the properties of minerals.
Rocks Extreme	6-12	Contains samples of sedimentary, igneous, and metamorphic rocks plus minerals of the earth's crust; plus 9 unknown samples and materials for mineral hardness testing.
Fossils	5-8	This kit contains a series of 9 stations where students study fossil samples, learn about fossil formation and geologic time. Also contains a DVD for viewing. (teachers without access to a DVD player may request one for loan along with the kit)

Advanced Fossils	8-12	This it contains a series of 12 large fossil samples for study and research along with student study worksheets and a set of silicon molds for making fossil casts using plaster of Paris.
Moon Phases	2-5	Students learn why the moon has “phases” and how they progress through the month using a model system and set of moon phase photo cards.

Engineering Materials:

Kit Name:	Suggested Grade Level:	Description:
Mini Unit Beams Engineering Kit	K-8	Build Multiple Bridges with 1 kit! Mini Unit Beams Bridge Builder set provides a rich and rewarding STEM environment. With no additional tools required, budding engineers are ready and able to create, develop, re-work, and marvel at their creations.

Physics/Physical Science Materials:

Name:	Suggested Grade Level	Description:
Acceleration Cars	5-8	Students use model cars and weight sets to experiment with force, mass, and motion. (Contains materials for 6 groups)
Constant Velocity Cars	5-8	Students use model cars and timers to calculate and explore velocity and changes in velocity. (Contains materials for 6 groups)
Density	6-12	Students study the importance of density as a property learn how to measure and compare the density of a variety of materials (Contains materials for 6 groups)
Tuning Forks	3-5	Students use tuning forks to demonstrate how sound is produced and travels through materials.
Magnets	1-3	This kit contains a series of stations in which students explore the properties and “behavior” of magnets.
Salt Cars	5-8	Students use salt to create a chemical reaction and observe how chemical energy can be transformed into motion. (Contains materials for 6 groups)
Kinetic Energy Ball Drop	5-8	This kit contains materials for a demonstration that shows the difference between kinetic and potential

		energy and the relationships among mass, velocity, and energy.
Light Box and Optical Set	6-12	Students use light boxes and a variety of lenses to explore properties of light including color, reflection, and refraction. (Contains materials for 6 groups)
Laser Prism Set	9-12	This kit includes a laser that can be used to demonstrate how a variety of prisms cause light to be reflected, refracted, or absorbed.
Waves and Sound	4-8	This kit contains materials for 5 stations at which students can explore and measure the properties of waves.
Thermal Energy	4-8	Students conduct experiments that demonstrate heat flow, temperature changes and changes in state. (Contains materials for 6 groups)
Storms	6-8	Contains materials for 12 stations at which students explore the hydrogeologic process underlying weather events such as thunderstorms, tornadoes, and hurricanes. Also contains a DVD for viewing (teachers without access to a DVD player may request one for loan along with the kit)
Digital PH Meters	6-8	Acid/Base testing lab using digital sensors
Gyroscopic Bicycle Wheel	9-12	Contains materials for an interactive demonstration showing momentum, angular momentum and inertia.

Equipment:

Materials identified as “equipment” are items (including samples and specimens) that can be loaned for teachers to use as part of an existing lesson plan of their own. Directions or identification information may be included to aid in the use of the equipment, but detailed lesson plans are not part of the kit.

Name	Materials included
Biosmount Specimens	Resin-mounted specimens of a preserved mammal heart, a preserved squid, and a preserved shark. (A second preserved squid is also available.
Brock Magiscopes	These are user-friendly, “no electricity required” microscopes. 2 sets of 6 are available for lending.
Fossils Samples (Cenozoic, Paleozoic, Mesozoic)	The kit contains demonstration samples of fossils from the Mesozoic, Cenozoic, and Paleozoic periods, with identification sheets for each.

Rock Collection	A collection of about 30 rock specimens of various types; can be used as a supplement to other geology lessons.
Electrophoresis Equipment	Electrophoresis chambers and micropipettes with tips. Chemicals and gels are not included. Each kit has 10 sets. Multiple kits may be borrowed for larger classes.
Vernier Data Loggers and Sensors	Digital temperature and gas pressure sensors designed to be used with Vernier Lab Quest software (Available on CD as part of the kit)
Portable DVD Player	For use with kits that contain DVDs, if one is not available for the classroom

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