

### **Overview:**

**Science:** Investigate animals on land and sea.

**Technology:** Learn all about alternative energy and the science of telecommunications!

**Engineering:** Channel your inner Newton while exploring kinetic and potential energy.

**Math:** Dive into solutions, measure density and become scientific mathematicians!

### **All About Animals**

Brings children into the amazing animal kingdom! Children learn about diverse, astounding creatures on Earth as they experiment with camouflage and get hands-on with real tooth and claw replicas. Organizing a wide range of creatures teaches how scientists classify everything from elephants to arachnids.

### **Energy Burst**

This energetic class explores energy transfer and energy conversion! Children jump and push up to reach their potential. They stretch and release wound rubber band gadgets. Pulling back a car lets children control how far it goes. Lifting balls against the force of gravity they learn about gravitational potential energy.

### **Super Power Sources**

Embark on a quest for alternative energy sources! They harness the sun's heat with a parabolic mirror and choose volunteers to ramp up a power generation station. They act as power hunters to pinpoint renewable and nonrenewable resources. Tight teamwork turns on solar devices and a united breath of air runs a fan-powered light bulb.

### **Moving Motion**

Children catapult into Newton's three laws of motion! They yank a cloth from under dishes and send crash test dummies flying. They adjust the mass of two identical cars and learn how heavier objects need a bigger push. See action-reaction forces as a fan cart races across the room and mini rockets launch through the air.

### **Life in the Sea**

Children explore different ocean ecosystems and learn about the plants and animals that live there. Classifying creatures from sharks and sponges gives them a taste of ocean diversity. They compare shark and whale teeth, and measure the size of these incredible predators. Learn about the interconnectedness of an ocean food web through fun hands-on activities.

### **Mix It Up**

Our junior Mad Scientists branch out into the physical aspect of chemistry. A four layer mixture shakes up the idea of water and solutions. Children pick up concepts of physical mixtures, solutions, and suspensions with sorting activities. Colorful demonstrations explain molecular movement and show how an antacid suspension buffers and upset stomach.

### **Get Connected**

Children take on telecommunications through interactive activities including seeing the sound of your voice and testing out telephone lines. Children chat on their own telephone network, find the limits to low power radio signals, wind through a cell tower relay, and learn how to track cell phone users.

### **Radical Robots**

Volunteers act out a robot remote control device and automation. Children circulate learning centers to control automation through sound, move a robot through a maze, and make a soccer robot score a goal!