



## **Grade 5: Mini Lab Boxes**

**Please choose one Mini-Lab for your field trip.**

### ***Physical Science***

#### **Mini-Lab #1 Edison's: It's Electric!**

Students create their own circuits, electromagnets and lights. Your class will discover the differences between series and parallel circuits in this electrifying workshop. They will also discover the relationship between electricity and magnetism. Students will learn about Thomas Edison one of the greatest inventors of all time!

**Projects include: Simple Flashlight, Tiny Dancer, and Play Dough Circuits.**

#### **Mini-Lab #2 Fizz, Pop, Bang!**

Students make three solutions with water, calcium chloride, baking soda, and citric acid. They systematically mix pairs of those solutions and observe changes that occur. The changes (formation of a gas and a white precipitate) are identified as evidence of a chemical reaction.

**Projects Include: Hand Warmer, Making Orange Soda, and Lemon Volcano.**

#### **Mini-Lab #3 Developing Models**

Students work with others as scientists and engineers to create proto-type models to explain how something works.

**Project Included: Stixplosions, Zappy Zoomers, Spinning Top**

#### **Mini-Lab #4: Separating Mixtures.**

Students make mixtures of water and solid materials and separate the mixtures with screens and filters. They find that water and salt make a special kind of mixture—a solution—, which cannot be separated with a

filter, but only through evaporation. Students are challenged with a problem: how to separate a mixture of three dry solid materials.

**Projects Include: Making Sea Water, Evaporation Dish, and Solid Mixture Activity.**