# LAES Steam Fair Project Ideas Grades K-3

# **Experiments**

Magnetic and nonmagnetic materials

Which materials conduct electricity best?

Which materials conduct heat best?

Sounds from different rubber bands (or glasses of water)

Which toy car rolls furthest?

Which materials dissolve in water?

Which paper towel absorbs the most water?

How vinegar affects eggshells

How a shadow changes throughout the day

Measuring rainfall with a rain gauge

Depth of snow at 10 different locations

Testing a sundial with a clock

What a plant needs to grow

Have a seed race – which seed germinates first? Grows the most?

Do large apples have more seeds than smaller ones?

Do different kinds of apples have different amounts of seeds?

What conditions do pill bugs prefer?

Can an earthworm detect light and darkness?

How far does a mealworm or snail travel in one minute?

#### Models and Demonstrations

How a bicycle works

How a generator (or motor) works

Simple machines

Levers

**Pulleys** 

Open and closed circuits

How a switch works

How fuses work

How a flashlight works

How light reflects

Mixing colors

How magnets work

An electromagnet

Friction

Newton's 3rd Law

How thermometers work

Heat and air (convection mobile)

Does air have weight?

Does air exert pressure?

Evaporation

How are sounds produced?

Why things float

Why elevators have counterweights

How things move on movie film

Why the wind blows

What makes hail?

Inside our earth (model)

The earth's surface features (model)

Volcanoes (model)

Features of the sea floor (model)

Our Solar System (model)

Galaxies and the Milky Way (model)

Optical Illusions

How the ear works (model)

The ant

How seeds travel

Do plants give off water?

Tree rings

Fermentation

## Observation

Fingerprints

Shadows

Crystals

Properties of solids, liquids and gases

Objects that pass and block light

Gravity

Shapes of magnetic fields

Rocks and minerals

The moon

Planets you can see

Our sun

Spring constellations

Local weather

How to read a weather map

Clouds

All about horses (or dogs, frogs, fish, birds, etc.)

A beaver home

Local wildlife

How animals, hide, defend, etc.

Animal tracks

All about crickets (or bees, beetles, ants, etc.)

Earthworms

Spider webs

Watching an ant colony

How insects change

Living things in my yard

Trees near my home

Leaf prints

Parts of a flower

Roots of different plants

Inside the egg

Teeth

Seashells

## **Collections**

Chemical elements (carbon, lead, iron, copper, etc.)

Solids, liquids, gases

**Feathers** 

Rocks, sand, soil

Fossils, bones

Seashells

Leaves, seeds

Bark rubbings