



Family Science Night Activities

West Georgia Youth Science & Technology Center

Title	Topic/Concept	Standard(s)	Description
Singing Frogs	sound	S1P1, S4P2	Wooden frog shaped musical instruments demonstrate vibrations that create sound.
Human Circuit	Conductors	S5P3	A circuit is completed and powers a light when a group holds hands and touches the sides of a specially designed ball.
Conductivity	Conductors/Insulators	S5P3	Various objects are tested to determine if they are conductors/insulators, with the goal of lighting a bulb with a circuit.
Build a Bug	Insects	S2L1*	Stamps are used to put together a picture of the three parts of an insect.
Blast Off	Force/Motion	S4P3	Popular activity with Alka Selzer & film canisters that send a rocket into the air.
Crabby Circuit	Insulators/conductors and circuits.	S5P3	Animal shaped cut outs with wires help students sort out insulators and conductors (when the conductors complete a circuit).
Bernoulli Ball	Force/motion	S4P3	A hairdryer demonstrates air pressure moving a ping pong ball toward a target.
Magnificent Magnets	magnets	S3P2	Given a set of various objects, students experiment to determine which are attracted to magnets.
Mini Hover Craft	Force/motion	S4P3	Students use a bottle top, CD, balloon, and hot glue to make a mini hover craft that slides across a smooth surface.
Straw Rockets	Force/motion	S4P3	Students use paper to make a small rocket that is launched by blowing air through a straw.
Constellations	Space	S4E1,2	Students use various materials to create a representation/model of a constellation.

Bed of Nails	Balanced & Unbalanced Forces	S8P3	When one nail is pushed with force on a balloon, it pops. When pressure is distributed evenly across many nails, it can withstand a similar amount of pressure without popping.
Recycle What?	Recycling or Mixtures	S2P1, S3L2, S5P2	Dryer Lint is used to make clay with glue, detergent, and water.
Newton's Nightmare	Magnets/Force/motion	S3P2	Move metal objects through a cylinder and see what happens. A strong magnet inside slows one of them down.
Simple Machines	Simple machines	S4P3, S8P3	Actual examples of each simple machine are provided along with identification/question cards that aid in understanding how each machine is used.
Sink or Float	Density, buoyancy	SKP1*	Sort objects according to the attribute of buoyancy. Guess which objects will float in water.
Two Steel Spheres	Properties of matter, density	S2P1	Estimate and measure the weight of two different balls. Guess which of two steel balls will float in water.
Rattlebacks	Force/motion/mass	S8P3	Twirl small plastic "spinners" that are designed to show how mass and shape can affect motion.
Learning Lizards	magnets	S3P2	Plastic lizards and frogs have been cut in half and have magnets inside. They appear to have jumped halfway through a clear plastic cup.
Balancing Rockets	gravity	SKP3, S4P3	Balance a rocket or another object on the tip of your finger. The center of gravity leads to a discussion of Earth's gravity.
Twirly Whirly Milk	chemistry	S5P2	Watch molecules move when milk and food coloring encounter detergent. You'll see that the fat molecules in milk won't mix with the molecules in the detergent.
NASA Spinning Toys & NASA Microgravity	gravity	SKP3, S4P3	Toys that have been tested by NASA Astronauts help students explore how gravity affects objects on Earth.
Rock & Roll	Rocks & Soils	SKE2	Students will sort a variety of rocks and soils according to texture or other attributes.

Do You Hear?	sound	S1P1, S4P2	Students will listen to the sound made when shaking objects in a plastic egg, and guess what it is.
Shadow Makers	light	S1P1	Shine a flashlight on black paper, wax paper, and an overhead page to determine how light behaves.
What's under the Microscope?	cells	S5L3, S7L2	Use a microscope to look at prepared slides of animal cells and plant cells.

*In these cases, the standard is related but not a perfect match.

At least one standard is listed for every activity, but it may match or relate to an additional standard in another grade.