



MAKING SCIENCE FUN!



ELECTRICITY SCIENCE KIT

NGSS CONNECTIONS

OVERVIEW:

As you know, the Next Generation Science Standards (NGSS) set expectations for what science concepts students should understand. These *ELECTRICITY SCIENCE KIT* activities start young scientists on the way to meeting those standards. Take a look and see what can be accomplished!



JUST FOR TEACHERS



Young scientists (**grades K-2**) who demonstrate understanding can:

- Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. **(NGSS K-PS2-1.)**
- Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. **(NGSS 2-PS1-2.)**
- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. **(NGSS K-2-ETS1-2.)**
- Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. **(NGSS K-2-ETS1-3)**

Young scientists (**grades 3-5**) who demonstrate understanding can:

- Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. **(NGSS 3-PS2-3.)**
- Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. **(NGSS 4-PS3-2.)**
- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. **(NGSS 4-PS3-4.)**
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. **(NGSS 3-5-ETS1-3.)**