



# MAKING SCIENCE FUN!



## AMAZING SCIENTIST NGSS CONNECTIONS

### OVERVIEW:

As you know, the Next Generation Science Standards (NGSS) set expectations for what science concepts students should understand. These *AMAZING SCIENTIST 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 determine the effect of placing objects made with different materials in the path of a beam of light. **(NGSS 1-PS4-3.)**
- Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. **(NGSS 2-PS1-1.)**
- Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. **(NGSS2-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.)**

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

- Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. **(NGSS 4-PS4-2.)**
- Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. **(NGSS 5-PS1-2.)**
- Conduct an investigation to determine whether the mixing of two or more substances results in new substances. **(NGSS 5-PS1-4.)**
- 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.)**