



MAKING SCIENCE FUN!



WATER SCIENCE KIT

NGSS CONNECTIONS

OVERVIEW:

As you know, the Next Generation Science Standards (NGSS) set expectations for what science concepts students should understand. These *WATER 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 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. **(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:

- Develop a model to describe that matter is made of particles too small to be seen. **(NGSS 5-PS1-1.)**
- Make observations and measurements to identify materials based on their properties. **(NGSS 5-PS1-3.)**
- 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.)**
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. **(NGSS 3-5-ETS1-2.)**