





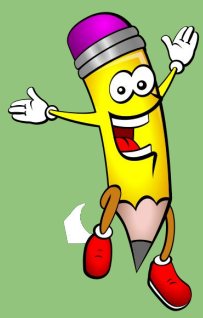
# Fact or Friction

Students will defy the odds by understanding the laws of friction.

3rd - 5th Grade

## Materials

-  Plastic container with smaller opening (water/ soda bottle, etc.)
-  Rice
-  Funnel
-  Wooden chopstick or pencil



## Directions

1. Use the funnel to carefully fill your container almost to the top, with rice.
2. Gently tap the container on a solid surface to get the rice to settle in tight \*this is very important.
3. Slowly insert the pencil or chopstick into the middle of your rice filled container until you are almost to the bottom. Hold the container tight so it doesn't tip over.
4. Over the solid surface, hold onto the part of the pencil or chopstick that is sticking out of your container. SLOWLY lift the stick up. This should bring with it, the rice filled container!
  - a. If it does not work on the first try, repeat step 2

## The Science

**Friction** is resistance that an object or surface has when moving over another. When you insert the pencil or chopstick, it forces the rice to pack tightly together to make room for the object. The friction between the rice and the object become so strong, that they are difficult to separate from one another, allowing you to pick up your bottle, without even touching it!

