



Recycled Yo-Yo Challenge

Thomas Edison said, "To invent, you need a good imagination and a pile of junk." With these words of wisdom in mind, we challenge you to create your own yo-yo using items found in your recycling bin.

A yo-yo is made from two identical discs connected in the center by a round rod or axle, with a piece of string looped around the axle. To build your own yo-yo, you will need to find materials to make each part: the two discs, an axle, and a piece of string. Most importantly, you'll need your imagination.

Ideas for Materials:

- **Two discs** – Try empty yogurt containers, cardboard circles cut from cereal boxes, or even plastic or metal lids
- **Axle** – Look for a corn dog stick, small plastic tube, or wooden dowel pin
- **String** – You'll need about three feet

Here's What You Do:



Raid the recycling bin for materials. (Adults sometimes refer to this step as "Dumpster diving.") Successful inventors rarely work alone, so ask an adult to help you dumpster dive for materials!



Once you have gathered your materials, sketch a picture of what you want your recycled yo-yo to look like when it is completed.



Assemble your recycled parts to build the yo-yo. Since this yo-yo is unique, you may need to try different materials before you get it just right.



Tie a loop large enough for one finger in one end of the string. Then tie the other end around the axle, just loosely enough that it can spin. Try it out!



Play with your yo-yo and tweak it to make it better.



Take a picture of your recycled yo-yo and email it to Sparky at sparklab@si.edu. (Make sure you have a parent's permission to send the photo.) Include your first name, hometown, and age. Sparky will judge the entries and the most creative yo-yo inventor will win a classic-styled wooden yo-yo.