Start Your Spark

Grab-Bag Inventing from Lemelson-MIT, art by Luke Flowers

Can anyone be an inventor?
Why not give it a try! Grab-bag inventing is
a fun way to unlock your creative spark.
You can do this by yourself,
or in teams with friends.

Put in some string!

Balloons!

Pie!

GRAB BAG
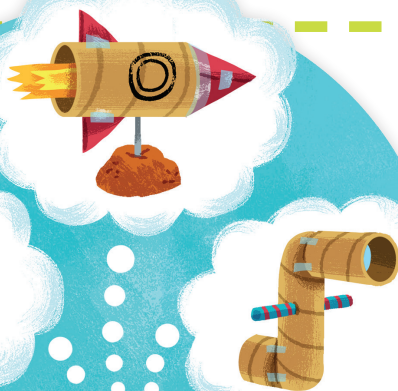
Make an Inventing Grab Bag

Get a bag (any kind) and put in 10 to 20 things that might be useful for tinkering.

It could include just about anything you like, such as: scissors, tape, string, cardboard tubes, pipe cleaners, cups, straws, rubber bands, paper clips, craft sticks, balloons, bottle caps, modeling clay, cardboard scraps, safety pins, buttons, spoons, toy cars, rubber balls, paper, pencils.

If you want, you can also add a "wish card" that can be used to stand in for one thing that isn't in the bag (such as a spring or wheels).

Warm-Up Exercise: How Many Ways?

Close your eyes and pick an item at random from the bag. In one minute, think of as many different ways to use it as you can.

For example, if you pull out a cardboard tube, it could be a: periscope, hot-dog holder, flute, chimney for doll house, marble run tunnel, clay roller, pencil holder, princess tower, snake house, gerbil chew toy, eyeglass holder, megaphone, cricket catcher, or—what else?

You Have a Mission!

Write out some problems to solve on strips of paper and put them in a hat. Each team (or person) picks one. Or you could all work on the same problem in different ways.

Some ideas for problem strips (and make up your own!):

•Your backpack keeps falling off your shoulders.

•You want to eat hot soup, but you don't have a spoon.

•You need to walk across some hot pavement to get to your shoes.

•You hit a baseball into a pond and need to get it back.

You have a pie you need to deliver suddenly!

•Your favorite toy car rolled under the refrigerator.

Solve It!

Now, come up with a solution to your problem using just what's in your grab bag. Give yourself a time limit, say 20 minutes or an hour.

Make a few drawings to help you plan how it will work. Then get building!

Tell Everyone

When you're all done, present your invention. How have you solved the problem? Will it work? If you were going to build it for real, what would you change?

I'm telling you, LOOK OUT!

Most importantly, HAVE FUN!