

Building with Foil or Cardboard

Materials:

- Aluminum foil
- Tape
- Pennies, toy cars, etc.
- Basin of water
- Cardboard box
- Marbles

Foil Challenges:

★ **Challenge #1**: Build a boat no larger than 4" x 4" x 4" (more or less). Float it in water. If your boat passes the float test, start adding pennies. How many can it hold?

Try other shapes and designs. Which works best? Why do you think it works better?

★ **Challenge #2**: What's the tallest structure you can build with 2 feet of aluminum foil?

★ **Challenge #3**: Build a bridge from table to table (6 inches or so apart) so a Matchbox car can cross.

Cardboard (and found materials) Challenges:

★ **Challenge #4**: Build a marble run using materials around the house

★ **Challenge #5:** Construct a pinball machine using cardboard and other found materials.