Tin Foil Boat

Materials:
- Tin foil
- Scissors
- Large bowl or container
- Pennies
- Water

Cut a piece of tin foil about 5 inches by 5 inches.
Fold up the sides of the tin foil to form a boat.
Fill the container with water and place your boat on the water.
Carefully start adding pennies to your boat. How many pennies can you add before your boat sinks?

If your boat sinks, dry off the pennies, make a new boat, and try it again!

What’s Happening?
Two different things are happening in this experiment. Gravity is pulling the weight on the tin foil boat and pennies down and buoyancy is an upward force that keeps the tin foil boat afloat. The gravitational force increases as more pennies are added to the boat. As long as the buoyancy of boat outweighs the gravity of the boat and the pennies, the boat will continue to float!