

Balloon Powered Boat

Supplies:

- Disposable plastic container
- Bendable drinking straw
- Balloon
- Tape
- Scissors
- Bathtub or large container of water



Steps:

A person in a red shirt is using scissors to cut a hole in the bottom of a black plastic container.	<p>Step 1: Hold the container upside down. Using the scissors, carefully cut a small straw-sized hole in the middle portion at the bottom of the plastic container.</p>
A person in a red shirt is poking a blue bendable straw through the hole in the bottom of the black plastic container.	<p>Step 2: Poke the short end of the bendy straw through the hole of the plastic container.</p>
A person is holding the black plastic container with the blue straw protruding from the bottom.	<p>Step 3: Pull the short end of the bendy straw through the hole so that the short part of the straw, above the bendable portion, sticks out from the inside of the plastic container. Set aside.</p>
A person in a red shirt is stretching a red balloon.	<p>Step 4: Stretch the balloon a few times to make it easier to blow up.</p>





Step 5: Slide the balloon onto the short end of the straw inside the container.



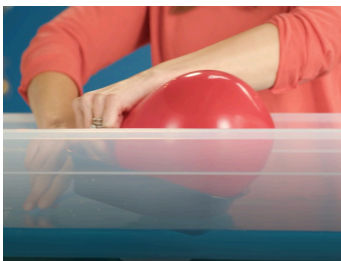
Step 6: Wrap a long piece of tape around the mouth of the balloon securing it to straw. Wrap enough times to ensure that there are no air bubbles and that no air will be able to escape through the mouth of the balloon.



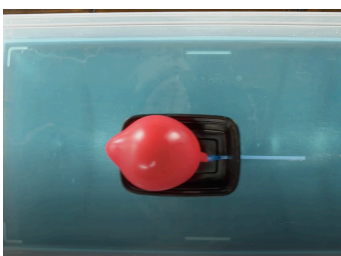
Step 7: Fill the bathtub or large container with water.



Step 8: Use the straw to blow up the balloon.



Step 9: Place the balloon-powered boat on the water and push the long end of the straw under the water.



Step 10: Release the container and watch the boat move through the water as the air is released from the balloon.

Who is Robert Fulton and what is the Industrial Revolution?

The Industrial Revolution was a time in history that changed the world forever through industry and machine manufacturing. Robert Fulton was an American painter who traveled to Europe and became interested in canals and water transportation. In 1800, Fulton designed and built one of the very first submarines called the Nautilus. In 1807, he designed and built the first commercially successful steamboat, called the North River Steamboat, that carried passengers from New York City up the Hudson River into upstate New York. In 1814, Fulton designed and built the Demologos, the first steam-powered warship. Robert Fulton's inventions helped to spur the Industrial Revolution.

Fun Facts:

- In 1712, an Englishman named Thomas Newcomen invented the world's first steam engine to help British miners dig for coal. This steam engine burned coal to heat water which turned into steam that had the power to move gears in simple machinery. This was something that had never been done before.
- With the invention of the steam engine, factories and machines could make goods like tools, clothing, and weapons much quicker. People could buy more goods at lower costs, which helped them live easier lives. Steam engines helped cities like New York and Boston become much bigger because more people were able to travel faster than ever before.
- The Industrial Revolution brought capitalism to America, a system in which private business owners, rather than the government, are in charge of a country's industry. Capitalism brought more opportunity and wealth to America during the 1800s and 1900s.