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Air Powered Cars

Have you ever wondered how you can make a car move without using any fuel or batteries? Well, get ready to become a mini-engineer and build your very own balloon-powered car! All you really need is an empty plastic water or soda bottle, plastic straws, plastic bottle caps, wooden skewers or skinny sticks, a balloon and tape.

The bottle becomes the body of the car and holds everything together. The bottle caps will be the wheels and help the car move. The axles are the wooden skewers and they will connect the wheels which makes them spin and move the car.

When you blow up a balloon, you're storing the energy inside of it which is referred to as potential energy. The air pressure inside the balloon creates the potential energy. When the air is released by letting go of the rubber band at the end of the balloon, the air rushes out! This is what will push the car forward. This energy is now kinetic energy, the energy of motion that pushed the car forward.

To get the balloon to power the car, tape the straws to one side of the water bottle, a few inches from each end. These straws act as guides for your axles. Slide the wooden skewers through the straws, and attach the bottle caps to the ends. Now your wheels are ready! Tape the balloon to the front of your car. Blow it up and pinch the end to keep the air inside.

Ready, Set, Go! Place your car on a smooth surface, release the balloon, and watch your car zoom! The escaping air propels it forward.

You can try different shapes for your car body to find out if a longer or shorter body affect how far it goes? You can also try different wheel sizes, larger or smaller to find out how it impacts the speed of the car. Building a balloon powered car helps you uncover Newton's laws of motion!

1. *Read the reading passage thoroughly.*
2. *Underline any word or sentence you don't understand.*