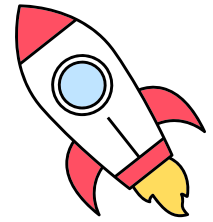


Name _____

Date _____

STEM Challenge

Balloon Rocket Challenge



Objective

To build a balloon-powered rocket and test its speed and distance.



Materials

- Drinking straw
- Balloon
- Tape
- String or fishing line
- Stopwatch or timer



Instructions

- Attach one end of the string or fishing line between two fixed points, creating a "track."
- Thread the drinking straw onto the string so that it can move freely along the track.
- Inflate the balloon and pinch the end to prevent air from escaping.
- Tape the balloon to the straw, ensuring it points in the direction of the track.
- Release the balloon, and time how long it takes for the rocket to travel from one end of the track to the other.



Challenge Questions

- How did the size of the balloon affect the rocket's speed and distance?
- What happens to the rocket as the air escapes from the balloon?
- How could you change the design to make the rocket go faster or farther?
- Can you calculate the average speed of the rocket based on the recorded times?