

Straw Rockets and the Scientific Method

Hypothesis:

1. Will a rocket with no fins go as far as a rocket with fins?
2. Will large fins or small fins make a rocket go farther?
3. Will a rocket fly farther if the fins are taped to the top instead of the end?
4. Will a short rocket or longer rocket go farther?

Problem: You will design, build, and launch several straw rockets to see which rocket can fly the furthest.

Materials:

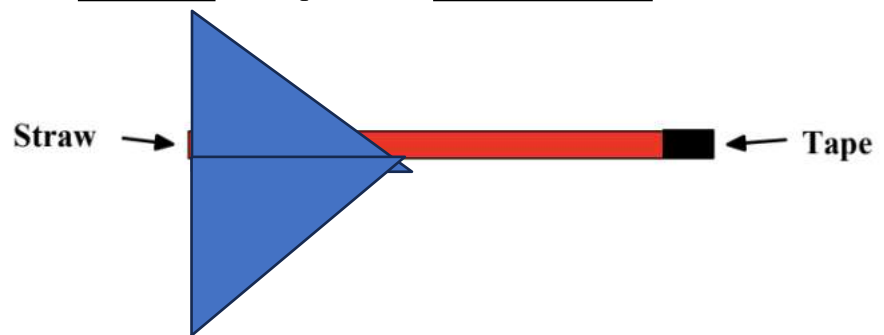
Rocket launcher, Tape, Cardstock, Scissors, Straws

Procedure: (see example in front of class).

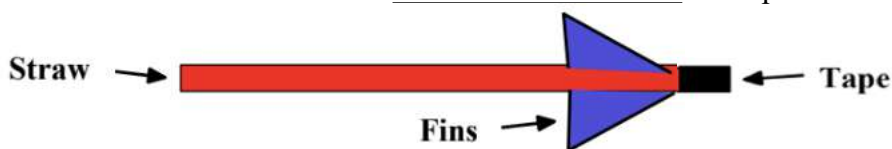
1. Get 5 straws and cut off the **bendy** part for each straw.
2. Pinch the top of a straw closed and then tape it shut with one small piece of tape. This will be your first rocket with **no fins**. Go launch it and record the distance it travels on the data table.



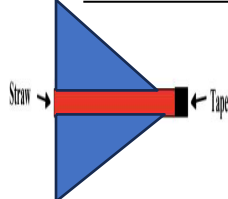
3. Repeat with another straw but make **3 fins** that are **very large** and taped at the **end of the straw**. Launch it.



5. Build another rocket that has **3 small and sleek fins** but tape them to the **top** of the straw. Launch it.



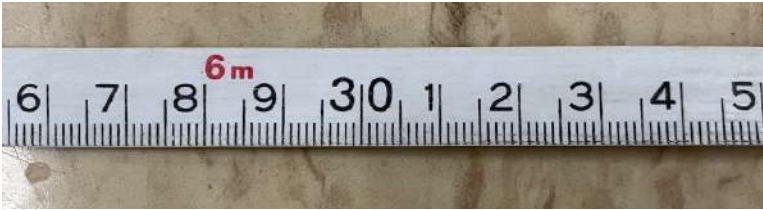
5. Build another rocket but first **cut the straw in half**. Add **fins** to the **end of the straw**. Launch it.



4. Build another rocket. It should have **3 fins** evenly spaced apart that are very **sleek and small** and taped at the **end of the straw**. Launch it.



How to read meters on tape measure



Data Table

No Fins

3 Large Fins at end of rocket

3 Small Fins at the top of the rocket

Short Rocket with 3 fins

3 Small Fins at end of rocket

Distance (Meters)

Conclusion:

1. Will your rocket fly as far without fins?
2. Where should the fins be placed on a rocket?
3. What size of fins should be used?
4. What length of rocket should be used?