

Straw Rockets

Build a rocket that can be launched by blowing into a single straw. Do not use your mouth! Be sure to use the balloon pump provided. Be sure to spend time on each step of the engineering design process – good luck!

The straw cannot be part of the rocket itself – it is only used to propel the rocket. You may use only the items in your bag (plus tape and scissors).

Materials

- Construction paper
- Computer paper
- Small foam sheet
- Coffee filter
- Small pastry cup
- Tape

Tools

- Scissors
- Ruler
- Straw (one for each group member)
- Balloon pump (to blow air into one side of the straw)

ASK

What information do you need in order to solve the problem? What questions do you have so that you can be successful?

IMAGINE

What ideas do you and your teammates have for creating a straw rocket? What is your team's best idea?

PLAN

Sketch out and label your plan on paper.

CREATE & TEST

Create and test your design. We will be testing as a whole class. Until then, you can test by launching your rocket against the wall, your desk, the back of your chair...

IMPROVE & RETEST

Take a moment to pause. What is going right? What is going wrong? What steps do you need to take next?

**Scientists study the world as it is; Engineers create the world that has never been.
- Theodore von Kármán**