

Operation Try & Fly

Create and design a launcher to compete in the farthest launched flyer!

MATERIALS (per team):

- 1 plastic cup
- 1 army figure
- 1 plastic spoon
- 6 popsicle sticks
- 2 rubber bands
- 2 ft. string
- 2 ft. masking tape
- Ruler
- Measuring tape

Students are required to use at least two materials, but not all are mandatory.

METHOD:

Objective: Use the materials to design a launcher that sends the army figure as far as possible.

1. Divide into teams of 2-3 and distribute materials accordingly.
2. Allow time for teams to design and build their launcher.
3. Launch from a starting line on one end of the classroom, hallway or outside.
4. Measure and compare the launch distance of each launcher.

TAKE IT BACK TO CLASS:

- Encourage students to iterate on their design for greater distance.
- Discover the physics terms related to this activity, e.g. force, velocity, projectile motion and angle.
- Add an accuracy challenge: Use a hula hoop or tape to create a circle on the ground. See which teams’ launchers are best at landing their army figure in the circle.

SOURCE:

[“A Week of STEM Activities!” from The Ardent Teacher](#)

NOTES
