



QUICK PROJECT



AUTHORIZED AMA
STE(A)M PROGRAM

JET CUP



AN OFFICIAL PUBLICATION OF THE ACADEMY OF
MODEL AERONAUTICS EDUCATION DEPARTMENT

MODELAIRCRAFT.ORG | AMAFLIGHTSCHOOL.ORG

SUPPLIES

Two Paper Cups (any size)

String (14-20 inches, dental floss, thread, etc.)

Writing Utensil (pen, pencil, marker)

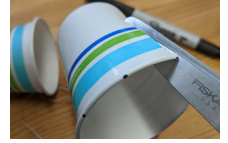
Scissors



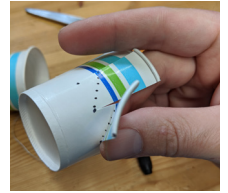
Instructions:

1. Draw eight dots around the lip of the first cup at equal distances apart.

2. Using the dots as guides, cut eight straight lines about 2/3 down the cup.



3. Bend each of the "blades" at a 45° angle so that your cup resembles a jet engine propeller.



4. You can make your Jet Cup fly by holding it "blades" side down and quickly flicking your wrist. OR...



5. Carefully make a small cut on the bottom of the cup and tuck in the end of the string.



6. Wrap the rest of the string around the cup, leaving about 4-6 inches to hold onto.



7. Place the 2nd cup on top of the first cup.



8. Quickly pull the string while lifting both cups in the air and see your Jet Cup fly away!

STANDARDS

4.PS.1 Investigate transportation systems and devices that operate on or in land, water, air and space and recognize the forces (lift, drag, friction, thrust and gravity) that affect their motion.

4.PS.2 Investigate the relationship of the speed of an object to the energy of that object.

4.PS.4 Describe and investigate the different ways in which energy can be generated and/or converted from one form of energy to another form of energy.

VARIATIONS

Try using different sized paper cups!

Try cutting the cup differently every time!

Try flying the cup using different techniques and from different heights!

LEARN MORE!

For in-depth curriculum and worksheets visit AMAFlightSchool.org/ArconicSteam and download the aerolab materials!

WATCH A VIDEO!

Visit AMAFlightSchool.org/quickprojects to watch a tutorial!