SUPPLIES

Foam Plate *(feel free to be creative! Try a paper plate or cardstock paper!)*

Penny

Tape

Scissors

Marker

LEARN MORE!

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

STEP-BY-STEP

See a step-by-step video on how to build and fly this aircraft by watching this video!

CHALLENGES

Furthest flight? Longest duration flight? Number of times in a minute to fly through a hoop? Get creative!

STANDARDS

3-5-ETS1-1 - Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints on materials, time, or cost.

4-PS3-4 - Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

ACTIVITY

1. Using the template, direct students in tracing the pattern onto the foam plate.

2. Have the students cut out the FPG-9 pieces from the plate. Note the notches indicated on the wings of the main piece (body) and the smaller piece (vertical stabilizer). Make sure students snip these.

3. Instruct the students to write their names on the larger of the two pieces using the permanent marker.

4. Hand out the pennies. Instruct the students to place the penny on the nose at the front of the body and fold it over, creating a little pocket. Use the tape to secure the penny.

5. Instruct the students to slide the vertical stabilizer (smaller piece) into the main piece via the two largest notches.

6. Using the tape to create an "L" shape, secure the vertical stabilizer to the body of the aircraft.

7. To fly the FPG-9, pinch the vertical stabilizer underneath the aircraft and gently toss it forward from shoulder height.

FPG-9 PATTERN

by jack Reynolds