

Community in the Classroom Presentation Plan

Lesson Name What Makes Thing Fly?

Presenter(s) Paul Smythe

Grade Level 2 Standards Connection(s) Physical Science: Motion can be changed with force

Abstract:

Building and flying paper airplanes is a great way to learn about basic aerodynamics. What's more, the principles behind paper airplanes are the same as those that shape the design of all aircraft! Students will learn all about lift, drag and thrust from a real flight instructor while experimenting with variations on a basic airplane design!

Vocabulary/Definitions:

Lift, Drag, Weight, Thrust, Streamlining

Materials:

Paper Airplane Templates/ Fan /Cardboard

Classroom Set-up:

Groups of 3-4

10-15 Feet for Flight Testing

Classroom Visit

1. Personal Introduction:

Senior at Embry-Riddle Aeronautical University
Commercial Pilot and Flight Instructor
I wanted to be a pilot when I was little

5 Minutes

Topic Introduction:

Anyone ever been in an airplane? What do you think makes them fly?
Anybody might want to fly one?

5 Minutes

2. Learning Experience(s):

- 1) Demonstrate the four forces acting on an airplane with the cardboard and fan.
- 2) Build the paper airplane and change the features to experiment with flight characteristics.
- 3) Kids will make their own.

25 Minutes

3. Wrap-up: Sharing Experiences and Building Connections

Kids will see each others paper airplane fly and review the new terms

10 Minutes

4. Close:

Answer Questions
Website for more paper airplane designs

5 Minutes

TOTAL 50 – 60 Minutes

Follow-up – After Presentation

Suggest students write a letter explaining "How we learned about Airplanes?"

List or attach examples of activities, websites, connections for additional learning.

Attach worksheets, hand-outs, visuals used in classroom presentation.

