



AUTHORIZED AMA
STE(A)M PROGRAM

PRE-K

QUICK PROJECT

**LEFT, RIGHT,
PAPER PLANES**



AN OFFICIAL PUBLICATION OF THE ACADEMY OF
MODEL AERONAUTICS EDUCATION DEPARTMENT

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RIGHT, LEFT, PAPER PLANES

Learning Standards/ Science Foundation 4: Engineering Early learners develop foundational skills in learning and understanding how to solve problems using the engineering design process.

SC4.1: Demonstrate engineering design skills

1. Infant – Explore and manipulate human made objects
2. Younger Toddler - Begin to construct and deconstruct using readily available materials
3. Older Toddler - Notice whether the solution was successful
4. Younger Preschool - Use classroom objects that function as simple machines to enhance play
5. Older Preschool - Select materials and implement a designated plan

MATERIALS NEEDED:

Airplanes Take Off and Land by Byron Barton, paper to make airplanes or already prepared paper airplanes

AMA STEM Kit: Original Storybook and pre-made paper and foam airplanes

PART 1: READ-ALoud

Airplanes Take Off and Land by Byron Barton

PART 2: DISCUSSION

Ask the students if they have ever flown a paper airplane. Let them know that they are going to have fun flying paper airplanes and learn about using math to have fun.



Scan QR Code or go to <https://www.nasa.gov/stem-ed-resources/make-and-color-a-paper-airplane.html>

PART 3: ACTIVITY

A: Allow each student to fly a paper airplane. Have them carefully walk to the plane after they fly it, counting off their steps

B: After everyone has had a chance to fly the paper airplane, ask them which arm they used to throw it

C: Instruct students to have a second turn, using a different hand to throw. Again, have them carefully

walk to the plane after they fly it, counting off their steps

D: Ask them which hand threw the airplane farther. (Their steps might need to be recorded if they are too young to remember.)

Note: A hula hoop may be used as a targeted landing zone to control where the airplanes are flown.

PART 4: SUMMARY

Today you learned about flying airplanes. You learned about which arm threw a paper airplane farther.

You can make paper airplanes and practice flying them and counting how far they go. How far will your paper airplane go the next time to fly it?



Scan QR Code or go to <https://www.amaflight.school.org/prek-quickprojects-paper-planes> for downloadable PDF.



HAVE MORE FUN
LEARNING AT HOME!



QUICK PROJECTS

A collage of various project cards from the AMA Flight School. The cards include: 'QUICK PROJECT PAPER', 'QUICK PROJECT COFFEE FILTER PARATROOPER', 'QUICK PROJECT RECYCLED MATERIALS HOVERCRAFT', 'QUICK PROJECT PAPER PLANE LAUNCHER', 'QUICK PROJECT PARATROOPERS', 'QUICK PROJECT PAPER MODEL PLANES ZERO', and 'QUICK PROJECT PAPER MODEL'. A circular inset shows a young boy in a dark jacket using red scissors to cut a piece of paper. A speech bubble from a cartoon bear character says 'LET YOUR MIND SOAR WITH THESE FREE PROJECTS!'. The background is a dark blue pattern of faint technical drawings and text like 'USE LAGE', 'WARNING! DO NOT FOLD TABS', and 'FOLD RADIATOR TUBE TABS'.

FIND INSTRUCTIONS, PRINTOUTS, AND VIDEOS AT
AMAFLIGHTSCHOOL.ORG/QUICKPROJECTS