

# **Paper Planes**

#### **Description**

Make paper planes and test how far they can glide through the air.

#### **Space Considerations**

A large space, indoors or outdoors, where kids can launch their airplanes safely. It is optional to have access to chairs so kids can experiment with launching their planes further.

### **Competencies**

- Development of fine motor skills
- Problem solving

#### **Materials**

- Paper
- Paper clip (optional)
- Tape (optional)
- Chairs (optional)
- Crayons, pencil crayons or markers

#### **Implementation**

- 1. Use the template below and follow the steps to create a simple paper plane by folding a  $8.5 \times 11$  piece of paper
- 2. Optional: Decorate your plane using crayons, pencil crayons or markers
- 3. Optional: View and print the <u>free templates</u> available online to make planes of varying folding complexity
- 4. Optional: Bring library books with paper plane designs into the program so participants can try to make more planes

Optional (with adult supervision only, after constructing a plane):

5. Mark how far your plane flew on your first throw

6. Straighten a paper clip out to form a hook (adult assistance may be needed):



- 7. Securely tape the long side of the paper clip to the nose of the paper plane, with the hook in front and facing downward
- 8. Flip a chair upside down so the legs are pointing up
- 9. Stretch a rubber band between two of the chair's legs
- 10. Hook the rubber band around the hook of the paper clip (which should be securely attached to your plane)

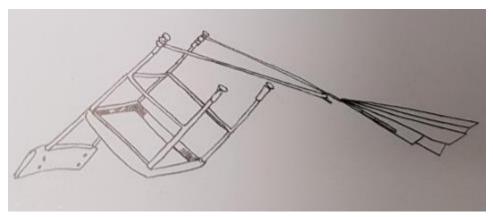


Image from *The 101 Coolest Science Experiments* by Rachel Miller, Holly Homer, and Jamie Harrington

11. Pull the plane back and let it soar; by pulling back the rubber band you created resistance and potential energy

## **Book Suggestions**

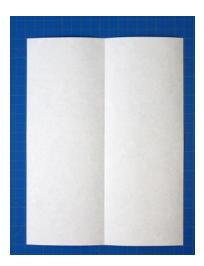
The Canadian Kids' Guide to Outdoor Fun by Helaine Becker The Dog Who Wanted to Fly by Kathy Stinson Dog vs. Ultra Dog by Troy Wilson

#### **Images and Templates**

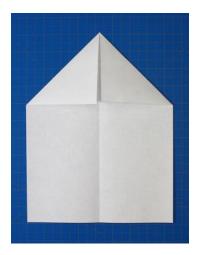
#### Instructions to make a simple plane

Images from Fold 'N Fly website

1. Fold an  $8.5 \times 11$  sheet of paper in half



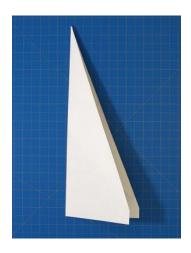
2. Unfold and then fold the top two corners into the centre line



3. Fold the top folded edges to the centre



4. Fold the plane in half



5. Fold the wings down to meet the bottom edge of the plane's body



### Finished airplane:

