

Lesson Plan

Glide or Spin?

Book: *Big Machines in the Air*

Series: Big Machines

Level: Scout

Objective

To help students identify similarities and differences among airplanes and other machines that fly through the air.

Supplies

- *Big Machines in the Air* book
- Access to two different paper airplane patterns from the Fold 'N Fly website:
 - Basic Dart: <https://www.foldnfly.com/1.html#Basic-Dart>
 - Tail Spin: <https://www.foldnfly.com/37.html#Tail-Spin>
- 3 blank sheets of paper for each student

Before the Activity

Read *Big Machines in the Air* out loud to students.

Activity

There are many different types of machines that fly through the air. The book describes a few of them. Use the following questions to discuss how these machines are similar and different:

- What do planes, gliders, and drones have in common? (Answer: They all have wings.)
- What makes a jet plane different from a drone? (Answer: People fly in jet planes. Drones do not carry people.)
- What makes gliders different from jet planes and drones? (Answer: Gliders do not have engines.)

Today, students will make their own miniature gliders. Show students both the Basic Dart and the Tail Spin. You can use images from the websites, or you can make sample planes ahead of time. Use the following questions to help students compare the shapes of these planes:

- How are the two planes similar? (Answer: Both planes have triangle-shaped wings.)
- What is different about each plane? (Answers: The Basic Dart is long and narrow. The Tail Spin's wings have an extra fold at the end, so they are shorter.)

Ask students to try folding each airplane, following the directions on the websites. Then, have students toss their planes. Students should write answers to the following questions, making sure each answer is a complete sentence:

- Did one paper airplane fly farther? If so, which one?
- Did either airplane flip or spin? If so, which one?
- Which paper airplane do you like better? Why?

Evaluation

Were students able to identify similarities and differences among the machines described in the book and between the paper airplanes? Could they fold and test the paper airplanes? Could they answer the questions based on what they saw?

Standards

This lesson may be used to address the Common Core State Standards' reading standards for informational text, grade 1 (RI 1.1, 1.10).