



## Cargo Plane

**Objective:** Compare the distance of two paper airplane and the value of the cargo.

**Materials:**

- Quarters, dimes, nickels, pennies
- Paper
- Adhesive tape
- Measuring tape

**Time:** 30-45 minutes

**Tip:** Challenge a family member in this cargo plane experiment.

**Step one: Plane design**

Decide on two paper airplane designs. They will need to carry a single layer of coins, and have a design to fly some distance. Test as many designs as necessary to find your perfect flyer.

**Step two: Folding & load**

Once two plane designs have been chosen, fold them with your paper of choice. Choose a variety of coins to tape onto your plane. Challenge yourself to put the highest value of cargo on your paper airplane. Each coin must be taped directly to your plane and cannot overlap another coin.

**Step three: Test**

Create a launch pad (tape on the floor will do), and have a measuring tape ready. Test each airplane. Continue to add cargo to have greater value than the other plane.

**Step four: Results/Retest**

How far can plane A be flown? How far can plane B be flown? Who has the greatest value of cargo? Can you add more? Do you want to try a different airplane design?

PLEASE share your designs, creations, and results with me.

I love to see all of your creative ventures.

-Miss Emily

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