

# STANDARDS

4-PS3-1 - Use evidence to construct an explanation relating the speed of an object to the energy of that object.

## SUPPLIES

**Standard 8.5"x11" paper**

**Markers, colored pencils, or crayons**

**Printer** (if you would like to use template)

## CHALLENGES

Create a target on the floor using painter's tape and try to land your airplane within the "landing zone"!

Trace different sized plates on a poster board and cut out the circles to create different sized targets to fly through! Hang your board from the ceiling or have somebody hold it up for you.

Fly your planes down a long hallway or corridor in your house. Using a measuring tape, determine who flew the furthest!

## STEP-BY-STEP

See a step-by-step video on how to build a similar aircraft by watching this video!



## KYLE BOYER

See even more paper airplane designs and learn from the best by visiting the foldable Flight channel on YouTube!

## A brief history of the paper airplane

It is unknown when the first paper airplane was made. However, many scholars suspect that the Japanese art of paper folding, also known as origami, which closely followed the invention of paper in China in 500 BCE, inspired some of the first paper airplane designs.

Many of the early aviation pioneers utilized paper models in their pursuit of flight, including Leonardo da Vinci, Sir George Cayley (the first person to recognize and identify the four forces of flight), and the Wright Brothers.

The first modern paper airplane as we would recognize it was designed by Jack Northrop (co-founder of the Lockheed Corporation), who used paper planes as test models for larger aircraft.

## World's Greatest Paper Airplane

*Numbers on template correspond to the instructions below!*

1. Start by folding the paper vertically creating a valley that hides the AMA logo. Unfold and flatten the paper.
2. Fold down the top two corners to the center of the paper so it resembles a house.
3. Turn the paper over and fold down the pointed top at the horizontal dotted line.
4. Fold down the first set of dotted lines.
5. Fold up point to lock sides in place, then flip paper over.
6. fold along the original "valley" fold so the AMA logo is hidden.
7. Fold down the wings on the dotted lines so you can see the logo.
8. Place a small piece of tape near the nose to keep the airplane all together. You can also attach a paperclip to the nose to add weight.
9. To fly, hold the airplane underneath the wings by pinching where the triangle is folded. Hold it roughly at shoulder height and toss gently forward.

## BE CREATIVE

Decorate your airplane using markers, crayons, colored pencils, stickers and more! Not sure how you want your airplane to look? Check out the National Model Aviation Museum's Digital Collections to get inspired by visiting this link!





