CLASSROOM - Aviation

Humans had to learn a lot about physics and master some Earthly forces to achieve flight. That's why the classroom is celebrating National Aviation Day this week.

Understanding the four forces of flight helped pioneers in aviation build machines that took them into the skies. Those four forces are:

- **Lift** - Holds the plane up
- **Thrust** - Moves the plane in the direction the pilot wants it to go.
- **Drag** - Slows the plane
- **Weight** - Determined by gravity

The shape of the plane, its wings especially, play a role in helping the plane stay aloft. The pull of gravity and the weight of the plane - from engines, passengers, cargo, and the material used to build the plane will determine its weight and impact how much lift is needed to get it up in the air. When the lift is greater than the weight, the plane will rise. When the weight is greater than the lift, the plane will fall.

Planes move us through the air from one place to another. Sometimes we're visiting family or taking a vacation. Many people fly on planes to get to work. But to move the plane in the direction it needs to go, thrust is necessary. Engines and propellers provide thrust. The plane overcomes drag when the thrust is greater. To slow a plane, pilots use drag by reducing the thrust. When the drag is greater than the thrust, the plane moves slower.

All these forces combined help to direct the plane.

HOW TO OBSERVE in the CLASSROOM – Aviation

Download and print this week’s projects. We offer two this week. You can also follow the suggestions below to help your students explore the days in their own way. It might surprise you what they discover! We’re often surprised by our own discoveries!

Celebrate Every Day in the Classroom by:

1. Asking a question about the day or observance and finding the answer.
2. Exploring the subject further. Whether you read a book, interview an expert, watch a documentary, or run an experiment, there is always more to learn about the observance.
3. Writing about the day or observance. You can write about what you learned or what the day means to you.
4. Telling someone about the day. You might be sharing information that is helpful to someone. Or, you might brighten someone’s day.
5. Solving a problem. Many observances discuss issues around the world that need fixing. How would you fix it?

Of course, as always, sharing on social media isn’t required; learning is. But if you do, please use #NDCClassroom to share on social media.

THIS WEEK’S PROJECTS

Download this week's projects to celebrate National Aviation Day and several others, too.
There are over 1,500 national days. Don’t miss a single one. Celebrate Every Day® with National Day Calendar®!