

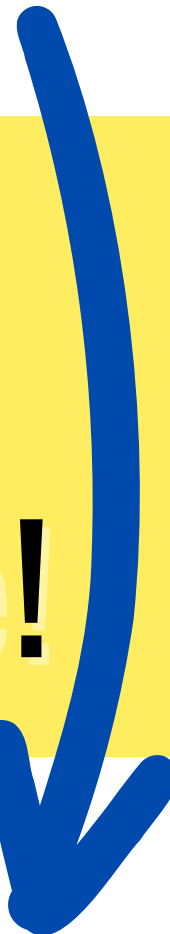
Flight Unit



- ✓ Day-By-Day Teaching Schedule
- ✓ 6 Lessons, Activities, and Project
- ✓ Google & Print Ready
- ✓ Aligned to NGSS

★★★★★ **Extremely satisfied** - “This resource was amazing for my ecology class that had no curriculum. It had amazing resources that I used!”

SCROLL
to take a look inside!



TEACHER BENEFITS

HOW THIS UNIT WILL HELP YOU

- **NO PREP** - Just Download and Teach
- Full DAILY Teaching Schedule
- 5-Week Unit with 6 Engaging Lessons, Interactive Activities, & Assessments
- Built-in differentiation for various learning styles

Flight Teaching Schedule

Day 1:

- Minds-On - HOW IT'S MADE: Airplanes (0-4:20) - https://www.youtube.com/watch?v=tlQ_AulO0Ag
- Flight WebQuest → students will need internet access

Day 2:

- Minds-On - HOW IT'S MADE: Airplanes (4:20-finish) - https://www.youtube.com/watch?v=tlQ_AulO0Ag
- Teach - Lesson 1 - The History and Future of Flight
 - Complete Student Notes
- Give Flight Digital Interactive Notebook
 - Students can complete Digital Interactive Notebook (DINB) Chapter 1: The History and Future of Flight
 - Activity 1: Video with Drag and Drop

Day 3:

- Minds-On (0-2:58) - Aerospace Engineer Answers Airplane Questions - <https://www.youtube.com/watch?v=HzdiSKINxkw>
- Give Flight Digital Interactive Notebook
 - Students can complete DINB Chapter 1: The History and Future of Flight
 - Activity: 2 Draw!
 - Activity: 3 Video

Day 4:

- Minds-On (2:58-6:22) - Aerospace Engineer Answers Airplane Questions - <https://www.youtube.com/watch?v=HzdiSKINxkw>
- Bill Nye - Flight
- Start - Lesson 2 - How Planes and Other Aircrafts Fly

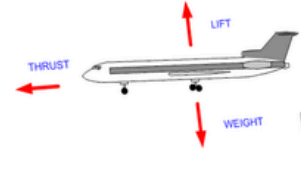
Day 5:

- Minds-On (6:22-8:34) - Aerospace Engineer Answers Airplane Questions - <https://www.youtube.com/watch?v=HzdiSKINxkw>
- Complete - Lesson 2 - How Planes and Other Aircrafts Fly
- Students can complete DINB Chapter 2: How Planes and Other Aircraft Fly
 - Activity 1: Write!

Flight Terminology

Being able to fly means you must master the four forces acting on a plane at all times

1. Thrust
2. Drag
3. Lift
4. Weight



Light Bones and Air Sacs

- For anything to fly, lift must be greater than weight
- Birds accomplish this in part by having a hollow bones which contain air sacs

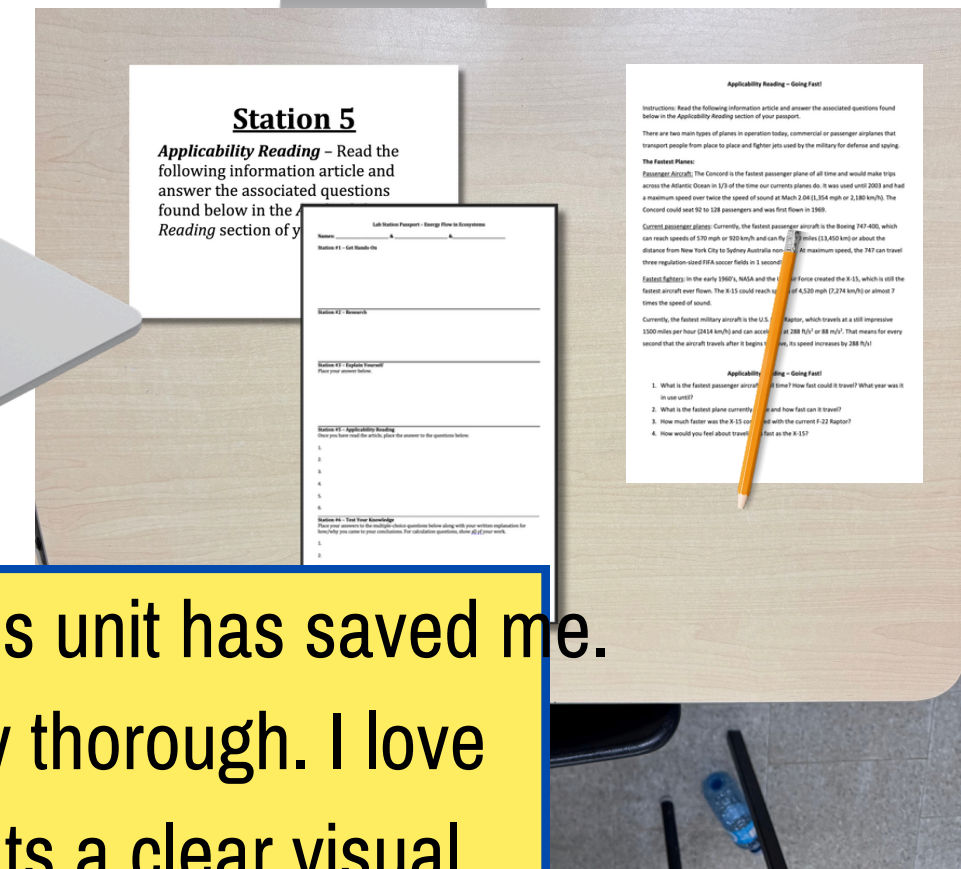
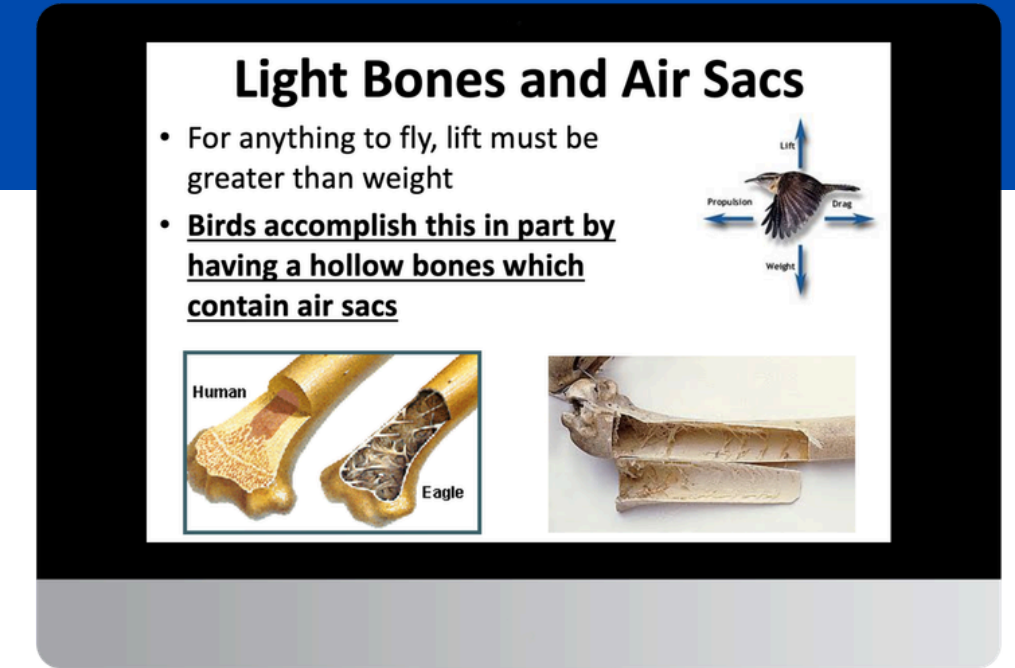


Scavenger Hunt - How Planes Fly - Location 1

- Watch a Video:
Watch the video below and answer the following questions:
- 
1. Faster flowing air exerts _____ pressure than the slower air beneath the wing.
 2. Do airfoils over and under wings meet up at the back?
 3. Which way must a wing deflect air in order to generate lift?
 4. How can wings deflect air down?
 5. Air is _____ and deflected down by the wing, pushing the wing _____ and _____.
 6. What two phenomena explain lift generated by a wing?

MY FLIGHT CURRICULUM SOLVES...

- ★ Planning fatigue
- ★ Student engagement slumps
- ★ Differentiation challenges
- ★ The large scope and sequence of Flight



“

★★★★★ Extremely satisfied - This unit has saved me. It is comprehensive, easy to use, and very thorough. I love the embedded videos that give the students a clear visual of the concepts that are presented.

”

✓ Complete Curriculum
Covering All Flight Topics

✓ Teacher and Student
Versions of each Lesson

✓ Embedded Videos in your
Presentations

✓ Many Different Activity Types

Your Unit

Birds

- When a bird flaps its wings, it sends air down and behind to produce thrust



- To accomplish this, a bird must twist its wings to create the right angle
- Birds accomplish this with very strong flying muscles

Birds

- _____
- To accomplish this a bird must twist its wings to create the right angle
- Birds accomplish this with very strong flying muscles



Extremely satisfied - Wow!!

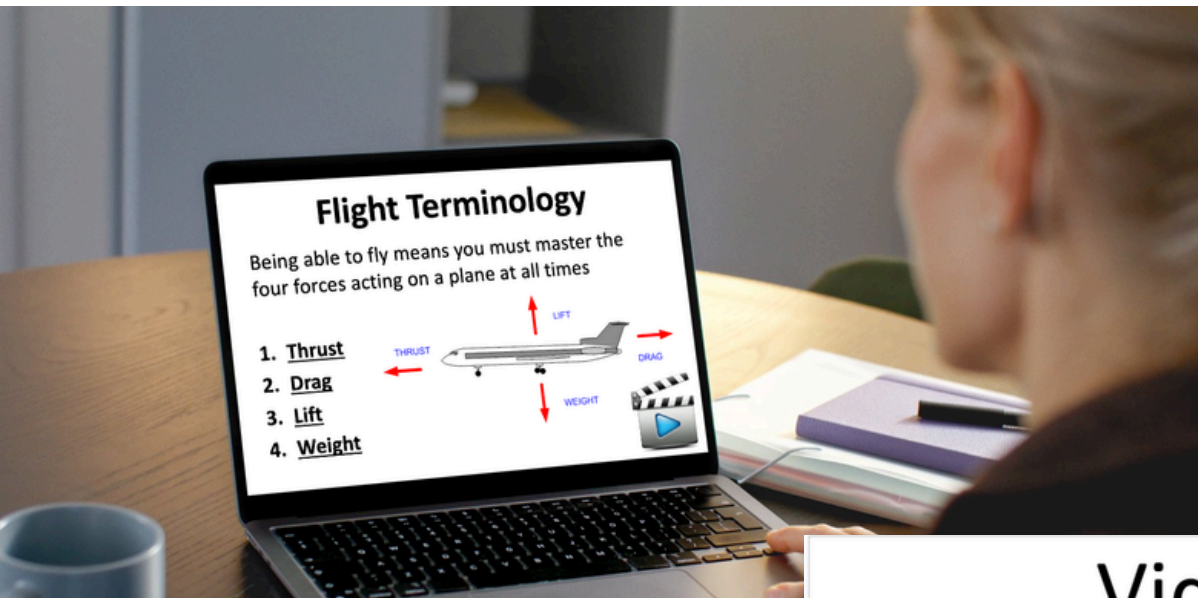
Amazing resource. It is so well put together and amazing to use. Thank you!!



Your Flight Unit

No PREP. All lessons are ready to go. Simply download and teach.

Daily Teaching Plans for ALL LESSONS.



Report!

Directions: You are a newspaper reporter covering space news. A scientist has just unveiled a new spacecraft. Your task is to write about the invention and how it alleviates the two main problems with space travel. Come up with a gripping headline and a brief article about this topic.

Type your answer here:

Video

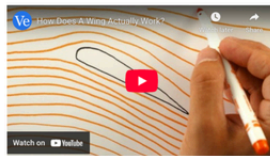
Click the video in Present Mode to play, then answer the following questions.



1. What are four ways to increase aircraft efficiency?
2. How much fuel does a Boeing 747 use?
3. About how many flights are over the U.S. right now?
4. What happened at the end of 2014?
5. What is Airbus exploring?
6. What is the side benefit of hydrogen fuel cells?
7. Describe Boeing and NASA's joint project.

Scavenger Hunt – How Planes Fly – Location 1

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Station 5

Applicability Reading – Read the following information article and answer the associated questions found below in the Applicability Reading section of your passport.

Station 51 – Concorde

Station 52 – Space Shuttle

Station 53 – Test Your Knowledge

Station 54 – Applicability Reading

Station 55 – Test Your Knowledge

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Engaging Activities and Projects

Digital and Print Versions

6 Engaging Lessons



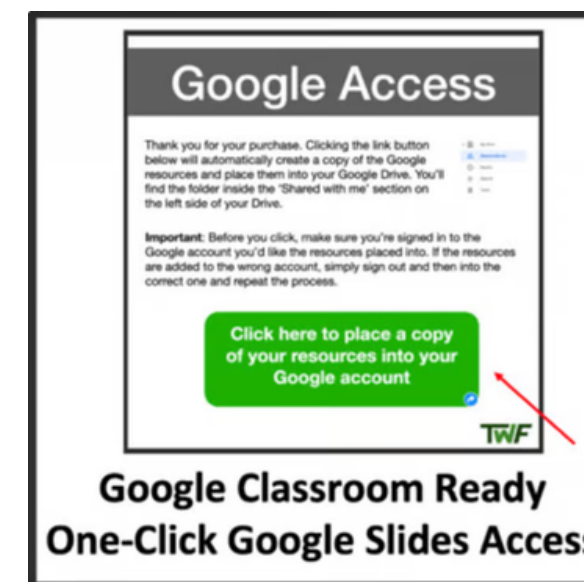
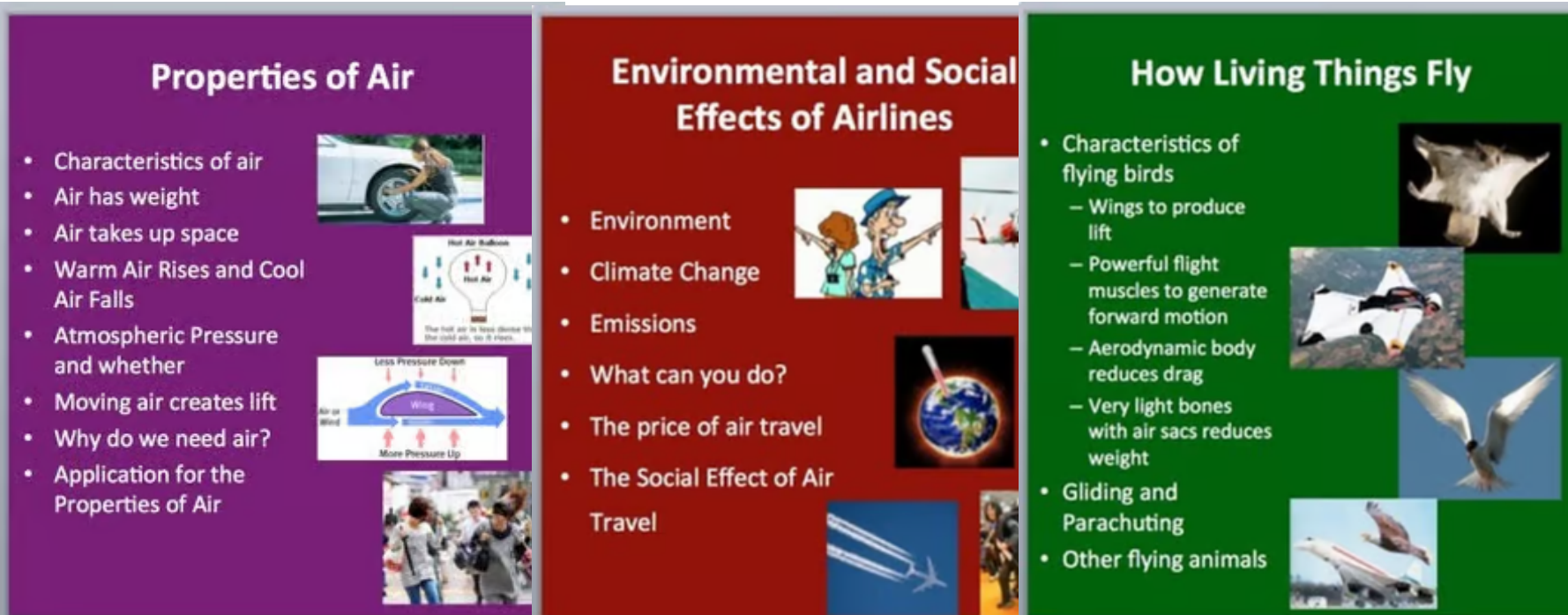
Teacher and Student Versions of Each Lesson



Fully Editable and includes Office, Google, and PDF Versions

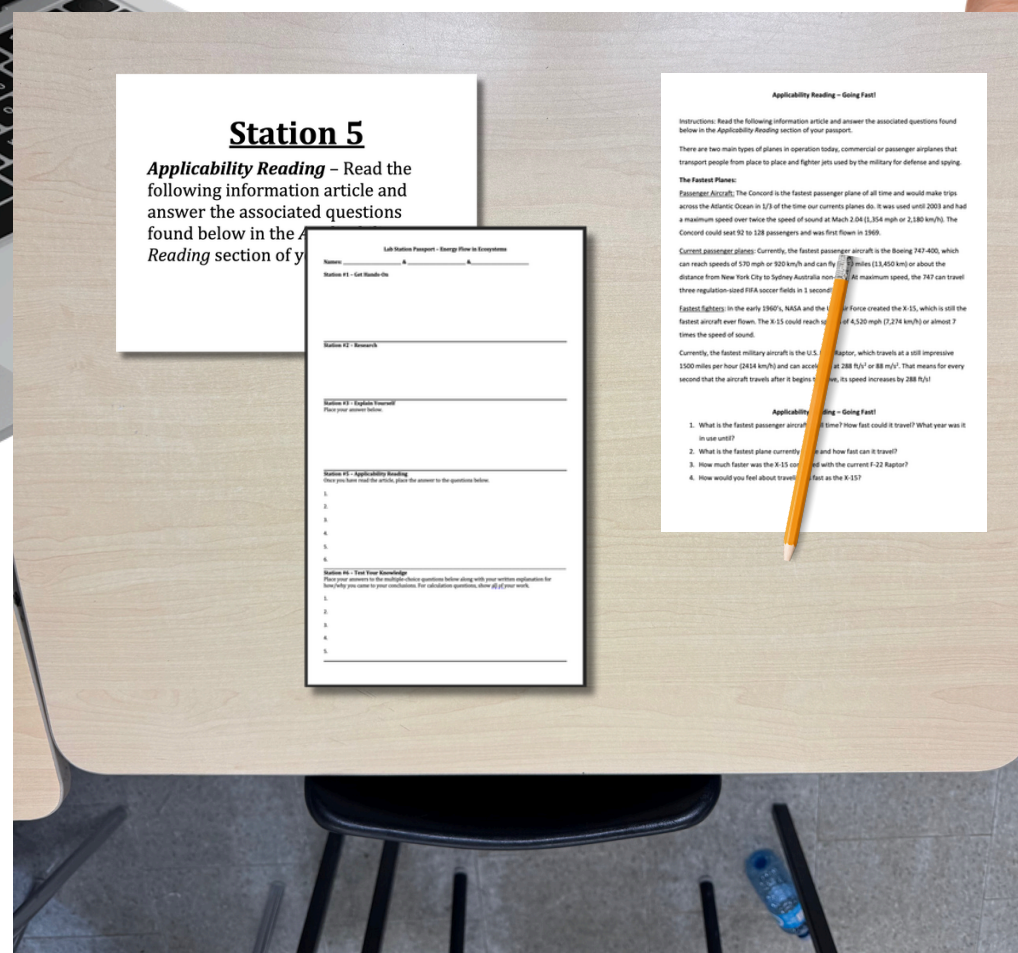
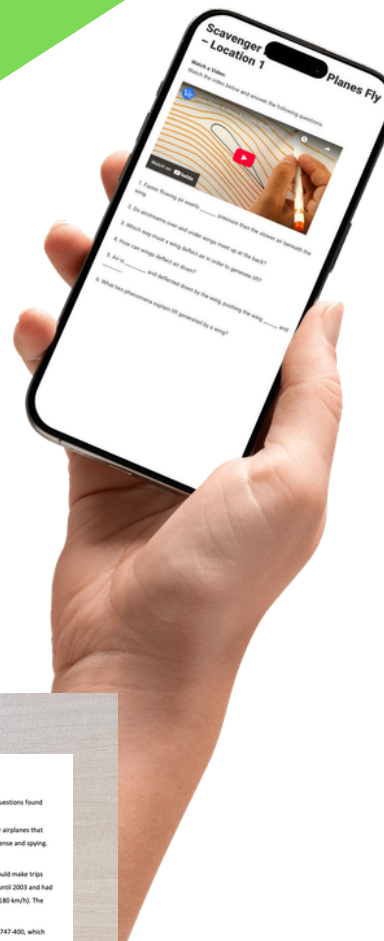
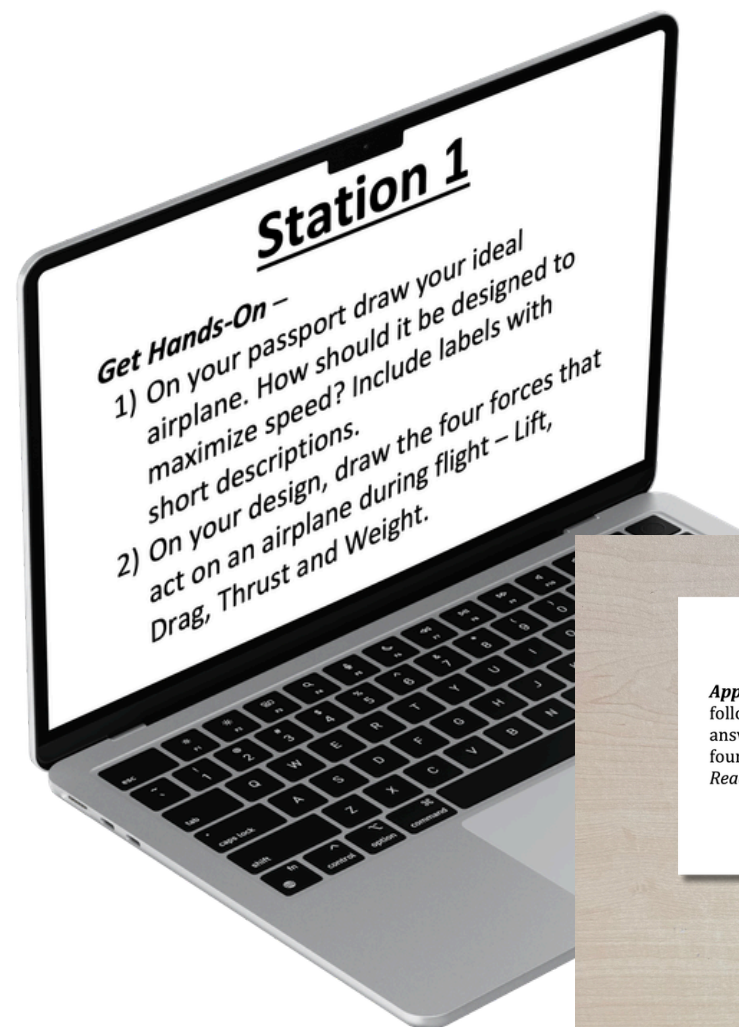


Each Includes an Auto-Graded Exit Ticket via Google Forms



Upload everything directly to your Google Classroom

Interactive Activities



- ✓ Lab Station Activities
- ✓ Projects
- ✓ Bell Ringers & Exit
- ✓ Tickets
- ✓ Interactive Notebooks
- ✓ Labs and Worksheets
- ✓ Digital Scavenger Hunts



★★★★★ Extremely satisfied - This is a great resource, is entertaining to kids, and is clear and concise. Embedded videos are great! Thank you so much!



Bonus Resources Included

Paper Airplane Angle of Attack STEM Lab

Scientific Method • Variables • Data & Graphing

- ✓ Classroom-Ready
- ✓ Data tables + bar graph templates included



NO PREP

PAPER AIRPLANE SCIENTIFIC METHOD LAB ACTIVITY



NO PREP

WHAT TEACHERS SAY

★★★★★ Extremely satisfied - This resource covers all you need to know about flight. The students were engaged throughout. Thank you for sharing.

★★★★★ Extremely satisfied - This is an amazing unit! My students were engaged and I really enjoyed teaching this unit. Thank you so much for all of your hard work.

★★★★★ Extremely satisfied - Excellent unit! Saved me so much work! Thank you!

★★★★★ Extremely satisfied - amazing! One of the best things I've bought from tpt.

★★★★★ Extremely satisfied - This has been a wonderful resource for our Flight Unit that we teach. It is very comprehensive. I would recommend it for others.

★★★★★ Extremely satisfied - What an amazing resource! Thank you so much for putting this together!!