

Flight

Digital Interactive Notebook

Chapter 1 – The History and Future of Flight

Chapter 2 – How Planes and Other Aircraft Fly

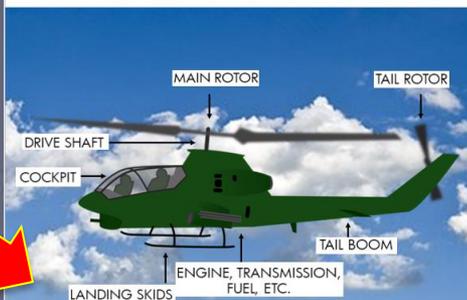
Chapter 3 – Improving Flight

100% Digital and Interactive

Directions: Drag and drop the labels onto the helicopter below and describe how helicopters fly.

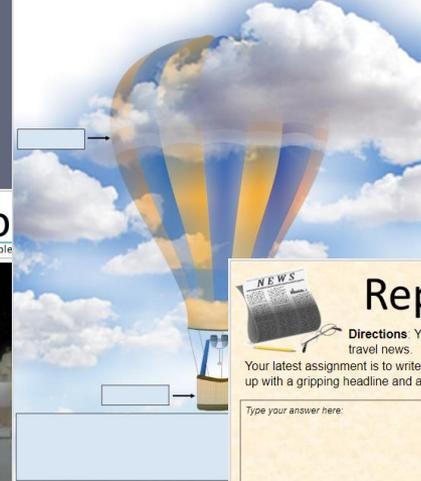


Directions: Drag and drop the labels onto the helicopter below and describe how helicopters fly.



Lift is generated by spinning the main rotor blades using an engine. The angle of the rotor blades can be adjusted to increase or decrease lift and generate thrust in any direction. The tail rotor allows the pilot to turn the helicopter left or right.

Directions: Label the hot-air balloon below and describe how hot-air balloons fly, including how they change direction. This activity may require additional research.



Video

Click the video in Present Mode to play, then complete the activity.



On the following pages, drag and drop the images, names, and events into the proper sections for the time period during which they occurred. For time periods containing multiple events, make sure to place the items into the order in which they occurred. You may delete any items that you do not use.

Report!

Directions: You are a newspaper reporter covering travel news.

Your latest assignment is to write about the benefits of air travel. Come up with a gripping headline and a brief article about this topic.

Type your answer here:

Chapter 4 – How Living Things Fly

Chapter 5 – Properties of Air

Chapter 6 – Environmental and Social Effects of Airlines

Flight

Digital Interactive Notebook

Thank you so much for taking the time to sample my **Flight** digital interactive notebook.

This notebook contains **25** activities and **36** total pages which will allow your students to bring their notes and thoughts together.

The notebook is fully editable and slides can be removed if needed as well as added. Additional slides are a great way for students to add their own notes, thoughts, questions, etc. and can be easily inserted at any point.

Flight

Digital Interactive Notebook

- So easy to understand and post. Have your students working in under 10 minutes
- The majority of the items in this resource are fully editable
- Slides can be added or removed easily to suit your classroom needs.

Click here to immediately download a sample Space Digital INB →

<http://bit.ly/TWF-DINB>

What's Included?

This Digital Interactive Notebook is broken down into 6 chapters. Chapters can easily be removed if they don't correspond to your curriculum needs.

Chapter 1 – The History and Future of Flight

Chapter 2 – How Planes and Other Aircraft Fly

Chapter 3 – Improving Flight

Chapter 4 – How Living Things Fly

Chapter 5 – Properties of Air

Chapter 6 – Environmental and Social Effects of Airlines

Video

Click the video in Present Mode to play, then complete the following activity.



On the following pages, drag and drop the images, names, and events into the proper sections for the time period during which they occurred. For time periods containing multiple events, make sure to place the items into the order in which they occurred. You may delete any items that you do not use.

Science Notebook

Your Name Here:

Flight

Directions: Label the hot-air balloon below and describe how hot-air balloons fly, including how they change direction. This activity may require additional research.



Directions: Drag and drop the labels onto the helicopter below and describe how helicopters fly.



COCKPIT

LANDING SKIDS

TAIL ROTOR

DRIVE SHAFT

MAIN ROTOR

ENGINE, TRANSMISSION,
FUEL, ETC.

TAIL BOOM



TWF



Report!

Directions: You are a newspaper reporter covering travel news.

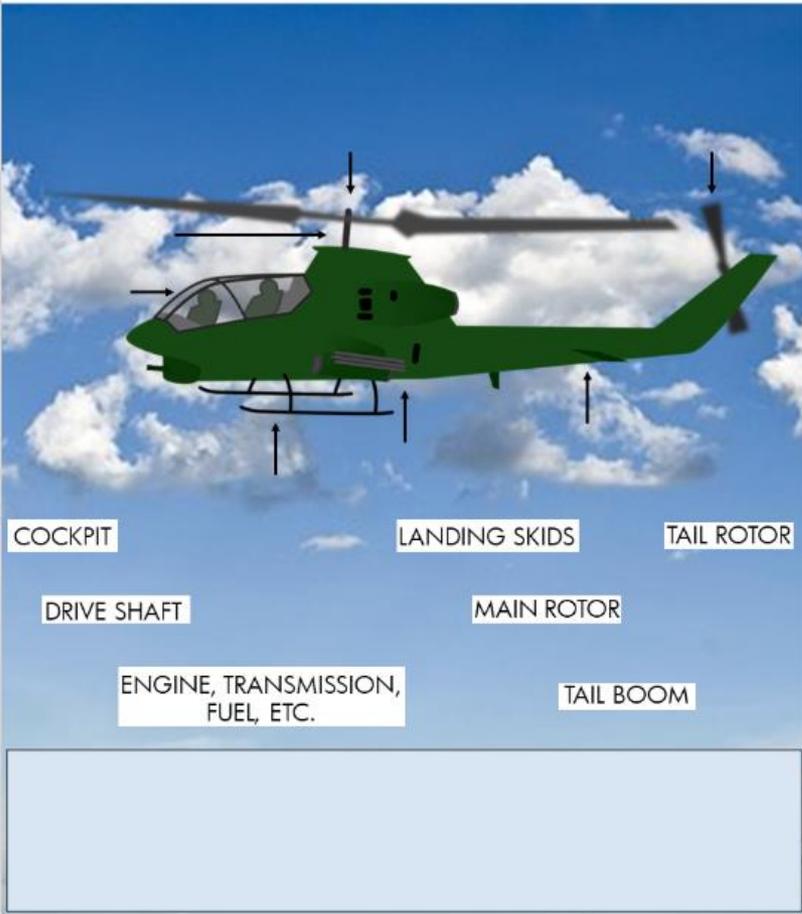
Your latest assignment is to write about the benefits of air travel. Come up with a gripping headline and a brief article about this topic.

Type your answer here:

Blank area for writing the report.

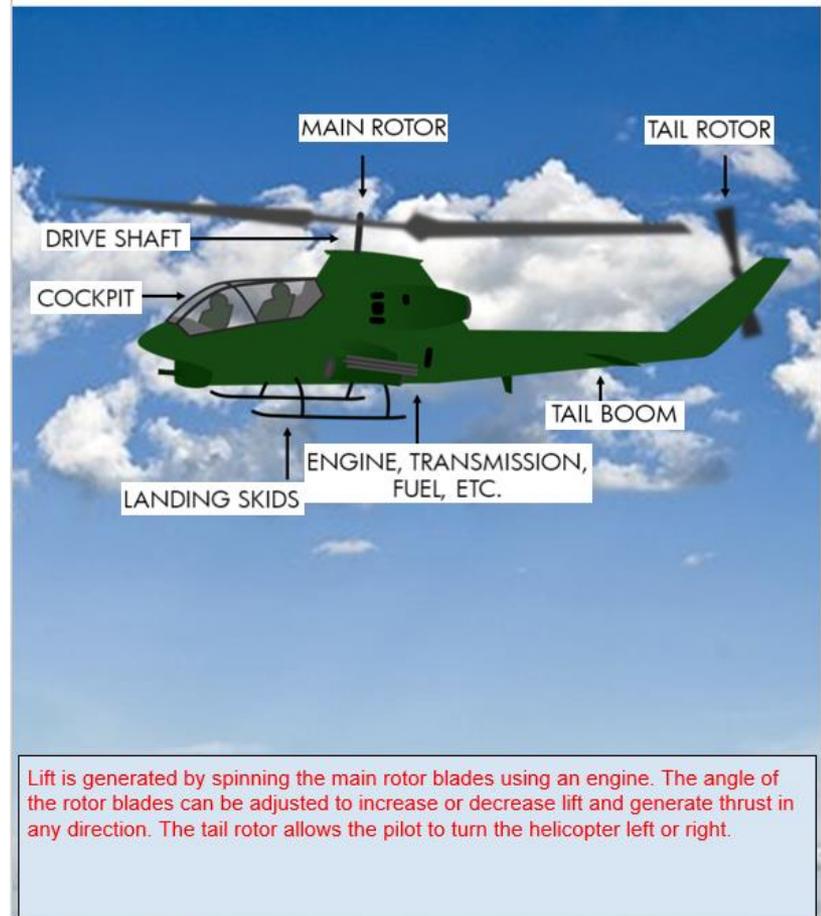
Interactive Drag and Drop Activities

Directions: Drag and drop the labels onto the helicopter below and describe how helicopters fly.



Students are able to move objects around the screen to complete the activity

Directions: Drag and drop the labels onto the helicopter below and describe how helicopters fly.



Creative Activities



Report!

Directions: You are a newspaper reporter covering travel news.

Your latest assignment is to write about the benefits of air travel. Come up with a gripping headline and a brief article about this topic.

Type your answer here:



Write!



Directions: Write a song or poem to help you remember the four forces acting on aircraft and how they must relate to one another to enable flight.

Type your answer here:

Students are able to express their creativity while demonstrating knowledge of the topic.

Short Answer and Other Reinforcing Activities to Improve Retention

Environmental Impact

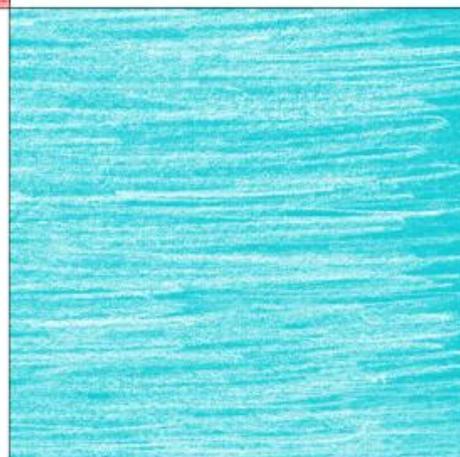
Directions: In the text box under "Impact", describe the environmental impact of air travel. In the red box, draw a symbol representing this impact. In the text box under "Solutions", list the ways this impact can be reduced. In the blue box, draw symbols representing the solutions.



IMPACT



SOLUTIONS



3-2-1 Review

Directions: In the box below, list three things you have learned and two things you wonder about the properties of air, and draw one symbol that represents these concepts to you.

Type your answer here:



Vocabulary and Extension Activities

As additional activities for early finishers or part of the main notebook assessment, your digital interactive notebook comes with three extension activities/projects plus a vocabulary section where students match terms with their definitions.

Extension Activity #1

Design a new type of aircraft using what you learned in this unit. This can be a drawing or a model. Your aircraft must be environmentally friendly.

You must:

1. Describe the materials used to build it.
2. Describe its purpose.
3. Describe how it flies.
4. Draw it.

Submission

- You will fulfill the requirements above by adding, and filling out, subsequent slides

Extension Activity #3

Create an extensive and detailed account of what you learned in this unit. You should include a picture - what are the concepts you learned? Fully summarize this unit and list the new things you learned. What surprised you? What was most interesting? What questions do you now have? What are you thinking about it? List the primary of each lesson's key concepts using pictures and information.

Include a picture of your work. You must fulfill the requirements above by adding, and filling out, subsequent slides. Slides 1-5 above can be done by yourself. Slide 6 will utilize at least a partner to properly summarize.

Extension Activity #2

Give three false statements about the material covered in this unit.

1. Write each statement.
2. Trade devices with another student.
3. Each of you must rewrite the false statements to make them correct.
4. Note the student with whom you completed this activity.

Submission

- You will fulfill the requirements above by adding, and filling out, subsequent slides

Vocabulary

Drag and drop the definition into the space next to the correct term.

TERM	DEFINITION
GLIDERS	
THRUST	
DRAG	
LIFT	
WEIGHT	
AERODYNAMICS	
DRONE	
ATMOSPHERIC PRESSURE	
BERNOULLI'S PRINCIPLE	
CONTRAILS	

A FORCE THAT ACTS PERPENDICULAR TO THE DIRECTION OF MOTION
 THE EFFECT OF THE DENSITY OF AIR MOLECULES
 THE FIRST HEAVIER-THAN-AIR FLIERS
 A FORCE THAT CAUSES AN OBJECT TO MOVE FORWARD
 THE FORCE OF GRAVITY ACTING ON AN OBJECT
 FORWARD MOTION
 MOVES AROUND OBJECTS
 A FORCE THAT OPPOSES MOTION
 AND HOW IT AFFECTS THEIR MOTION
 CLOUDS OF CONDENSED WATER VAPOR
 UNMANNED AERIAL VEHICLE
 FASTER MOVING AIR HAS LESS PRESSURE

Flight:

Digital Interactive Notebook

- Works with Google and OneDrive cloud services
- If you don't currently have a Google account, you can sign up for one completely free and get started in 5 minutes. If you're a OneDrive user, no problem. Simply download the notebook as a PowerPoint file to your computer then upload it to your OneDrive account.
- The majority of the items in this resource are fully editable. In addition, slides can be added or removed easily to suit your classroom needs.

Interactive Notebooks

THEN: Before computers, we used interactive notebooks to engage our students and keep their notebooks organized and accessible. This, however, required a lot of material and the unwelcome task of lugging them all home with you to mark. But we used them because they were effective and allowed us to effectively assess our students' understanding.

NOW: Why use digital interactive notebooks? As prices decrease, many schools are moving towards a 1:1, computer-student ratio and are becoming digital. The way we teach needs to keep up. You don't even need a class set of computers; a personal device (cell phone, laptop, tablet, etc.) will work just as well.