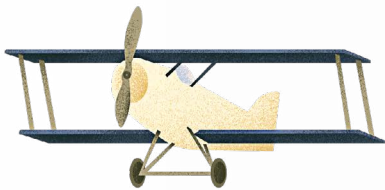
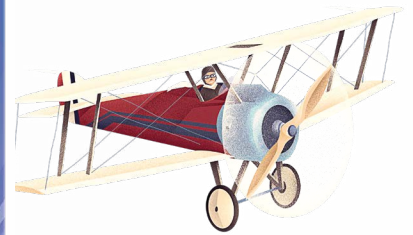
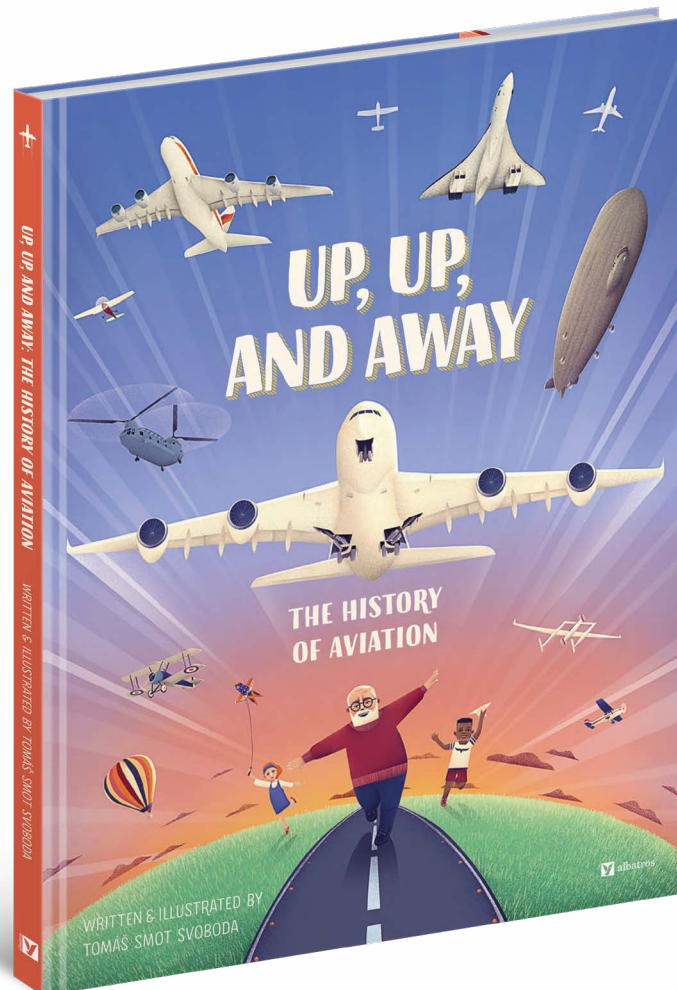


UP, UP, AND AWAY THE HISTORY OF AVIATION

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GUIDE FOR TEACHERS

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Created by Dolly Ko, M.A.

Curriculum: Engineered Design; Science, Technology and Innovation

● AGES 9-12

● GRADES 4-7

● ISBN: 9788000074603

● LEXILE LEVEL: 1030L

● GR LEVEL: W

BEFORE READING

Essential Questions

1. Where did early humans get the idea of flying?
2. Who were the first aviators and why are they famous?
3. What events in history transformed the way we travel?
4. What are the different types of aircrafts and how do they work?
5. Why were some aircrafts unsuccessful and no longer seen today?
6. What kinds of aircrafts are presently used?

Discussion Questions

Look at the cover of this text. What do you notice?

Do you have any questions?

What do you think the word “aviation” means?

According to the blurb, what will you be reading today?

Make a list of vehicles that fly in the air. What do you already know about them?

When was the last time you were in a flying vehicle? Who were you with? Where were you going? Describe your experience.

What text features has the author and illustrator provided to help you understand the text? How do you think they will enhance your understanding of the topic in each chapter?

Grandpa Edward is the first to welcome us to read this text. He tells the reader to explore the room. What are you noticing around the room?

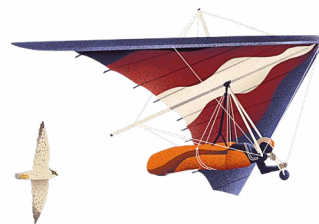
Take a look at the table of contents. There are numbers next to some of the images in the room on the page. Why did the author do this?



DURING READING

As you read the text, pause at the start of each chapter to pay special attention to the text features that are provided by the author.

Discussion Questions



- Have you ever looked at a bird and dreamed of flying?
- How are birds' bodies made for flying?
- What is a myth?
- What was a kite originally used for and what is it used for today?
- What is folklore?
- Who was Abbas Ibn Firnas and what is he famous for?
- Who was Leonardo da Vinci and why was he famous?
- Describe the unsuccessful aircrafts you learned about and explain why they were not successful.
- What are aeronauts?
- Explain why the first public balloon flight did not have a crew.
- Who were the world's first aeronauts?
- How did the Montgolfier brothers influence the world of flying?
- How do balloons fly?
- What are some uses for balloons?
- What is an airship? Have you ever heard of an airship?
- What are some advantages and disadvantages of airships?
- How were hang gliders controlled?
- Who were the Wright brothers and what did they do?
- Who were the first aviators and why are they famous?
- Other than passenger planes, what other kinds of planes are there?
- What kinds of tasks can planes help with?
- Where would you go if you had a private jet to travel in?
- How did jet engines change the world of aviation?
- How has The Boeing 747 changed over the years?
- How is a supersonic plane different from others?
- What were some reasons why the Concorde was not an ideal way to travel and why was it retired?
- How are helicopters different from airplanes and other aircrafts?

AFTER READING

Go back to reread parts of the text that you found most interesting.
Be mindful of all the text features provided by the author.

Discussion Questions

What are you noticing as you read the text again?

Look at the title of each chapter. How does the title of each chapter help you determine the main idea? What was the main idea in each chapter?

Complete a timeline of events to show important events in history that shaped the world of aviation.

Early humans were inspired by birds and always dreamed of flying just like them.
Is there another animal that inspires you?

Legends, myths, and folktales around the world all contain stories about flight.
Is there a story that you've heard in your culture?

Of all the aircrafts that you learned about in this text, which would you want to own?
Why? Where would you go?

Writing

Write a factual or fictional story about an experience you have with one of the air crafts that you learned about in the text. Where did this experience take place?
Where were you going or coming from? Use detailed descriptions about how you were feeling during this moment in time.

Examples: Kite, hot-air balloon, hang glider, passenger plane, jet, helicopter, or other.

AFTER READING

Famous Aviators

You learned about some key figures in history that shaped the world of aviation. Use the chart below to collect information about some people that you enjoyed learning about. How did each of these figures influence the world of aviation?

Name	Influence on Aviation

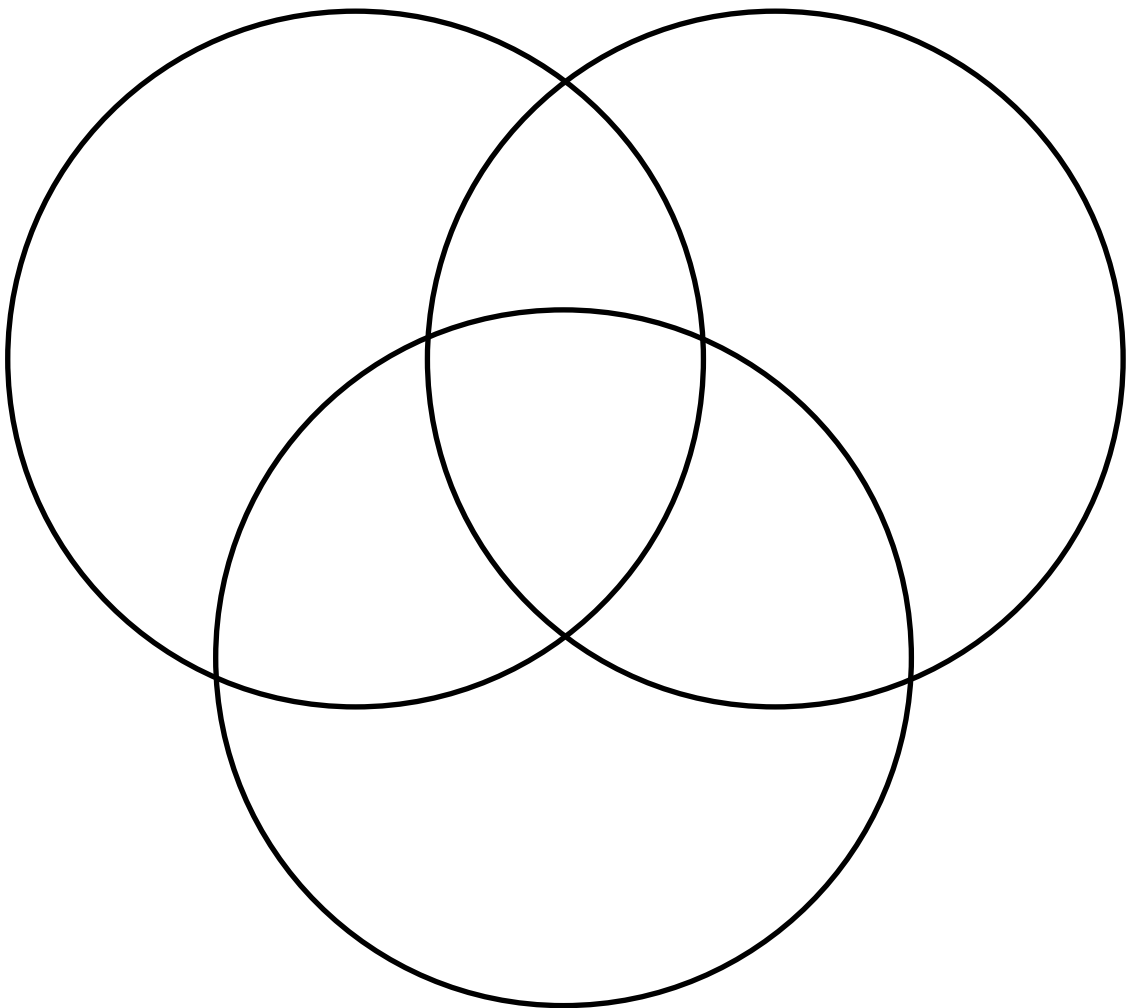


AFTER READING

Compare and Contrast

A 3-circle Venn diagram is useful for comparing and contrasting three different groups, ideas, or objects. Where two circles overlap, it shows the common characteristics of two things, and where all three circles overlap, it shows the characteristics shared by all three things. The distinct areas represent unique characteristics.

Use the 3-circle Venn Diagram below to compare and contrast three different aircrafts that you learned about in the text.



AFTER READING

Future of Aviation

What do YOU think is the future of aviation? Use the space below to describe an aircraft of the future. Be sure to include a detailed illustration.

