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MY LEARNING GOALS

I can

- o tell about flying machines.
- o find causes and effects.

Up in the Air

Have you ever watched a bird fly? Long ago, people watched birds. The people wished they could fly, too. Today, people fly in airplanes. Before airplanes, people made other flying machines.



Cause and Effect

A cause is why something happens. An effect is what happens.

Cause

People wanted to fly.

Effect

People made flying machines.

Some words show causes or effects. Some of these words are if, because, so, and then

Write an effect for the cause.

Cause

People do not have wings.

Effect





MY LEARNING GOALS

I can

- read and understand a story about flying machines.
- find causes and effects in a story.

Flying Machines

People thought about flying for hundreds of years. They dreamed of flying machines. In 1799, a man built one. He made a large machine with wings. People called the machine a glider.

The glider flew. But it was not very good. This was because it was too hard to move around in the air. Other people tried to build gliders. Soon, a man named Otto made his own machines.



This is Otto and his glider.



This is what some gliders look like today.



Highlight the sentence that shows why the first glider was not good.



If you made a flying machine, what would you call it?

I would call my flying machine



Just Like Birds

Otto Lilienthal was born in 1848 in Germany. He was an engineer. That is a person who builds machines. He wanted to build a machine that would let a person fly. First, he read a lot of books about flying. Otto learned how birds fly. He looked at birds' bodies. He looked at their wings.

Otto had some new ideas about flying, too. He built different kinds of wings. Otto tested them. He saw what the wings did. He looked at how they moved through the air. Otto's wings looked like bird wings. They caught the air below them. That helped them fly. Otto made his wings bigger and stronger than a bird's wings. They could carry a person.



Otto Lilienthal

Underline the words that tell why Otto made the wings big and strong.



If you could make a new machine, what would you make?

I would make a _____ because



Up, Up, and Away!

Otto built his own gliders. He made 16 of them. He made them each different. He wanted to see which one worked best. Then Otto flew his gliders. He started flying in 1891. He flew about 2,000 times! Many people watched him fly. They took pictures. People made short movies. People around the world saw the pictures and movies. People read about him in newspapers. Otto was famous.



Otto flying his glider

Circle the number of times Otto flew his gliders.



Why did Otto make each of his gliders different?

He made each of his gliders different because _____.



From Gliders to Airplanes

Flying these gliders was unsafe. Many people were hurt. Otto died because one of his gliders hit the ground too hard. But people who wanted to fly learned from his ideas. They used Otto's ideas. They made flying machines strong and safe.

Two brothers thought Otto had great ideas about flying. The Wright brothers had their own ideas, too. In 1903, the brothers made a real airplane. They flew it. They were the first people to fly an airplane. They did it with Otto's help.



Airplanes carry many people today.

Circle the word that means "can hurt people."



How did Otto help the Wright brothers?

Otto helped them by _____.



Show What You Know

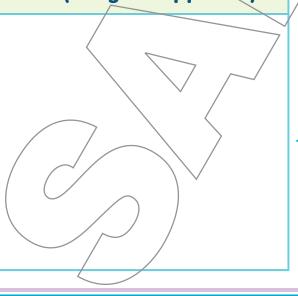
Use what you have learned to fill in this chart. Look back at the story if you need help.

Cause (Why it happened)

Otto was in many pictures and movies.

Effect (What happened)

Cause (Why it happened)



Effect (What happened)

Otto died.



What Did You Learn?

Circle the letter of the correct answer.

- 1. Which word in the story means "a worker who makes machines"?
 - A glider
 - **B** idea
 - **C** engineer
- 2. Otto was born in
 - A 1848
 - **B** 1891
 - C 1903
- 3. Otto learned about to make better gliders.
 - A birds
 - **B** airplanes
 - **C** movies
- 4. Why did Otto put big wings on his gliders?
 - A so they could be safer
 - B so they could carry people
 - c so they could look like birds



Listen and Discuss

Listen to a teacher and a student talking.

Take notes on the Venn diagram below.

MY LEARNING GOALS

I can/

- understand people talking about gliders and airplanes.
- tell how gliders and airplanes are the same.
- tell how gliders and airplanes are different.

Gliders Both **Airplanes**

Listen and Discuss SPEAKING Would you rather fly in an airplane or a glider? Glider Airplane

Learning About Language

MY LEARNING GOALS

∕I can⁄

- of find homophones.
- write sentences using homophones.

Homophones

Homophones are special words. They sound the same. But they are not spelled the same way. They also have different meanings.

Blue and blew are homophones.

The airplane flew in the blue sky.

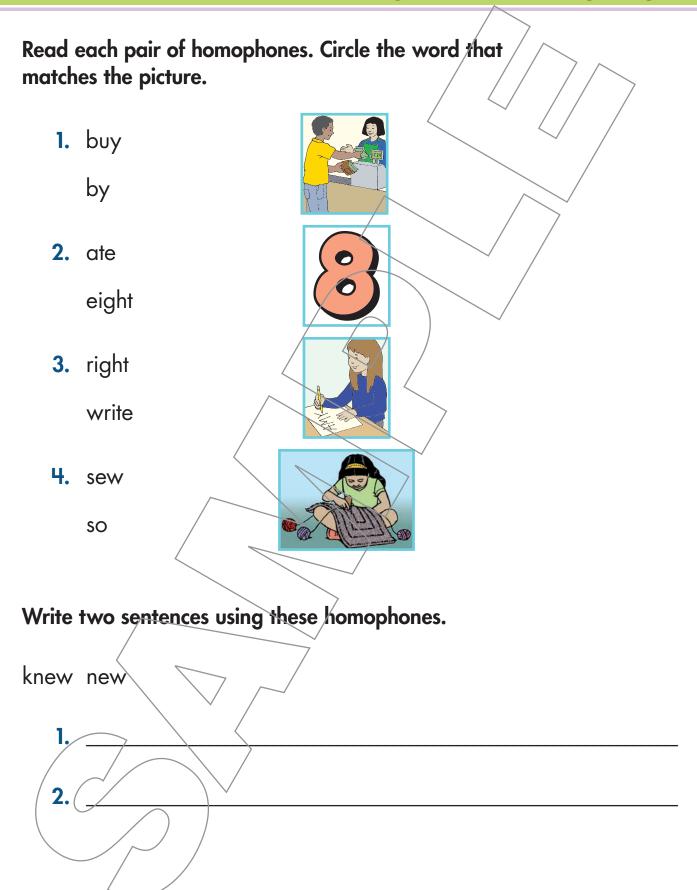
The wind **blew** the glider.

Read these sentences from the story. Then circle the homophone that fits in the sentence.

- 1. Other people tried [to two] build gliders.
- He wanted to build a machine that[would wood] let a person fly.
- 3. He wanted to [sea see] which one worked best.
- 4. People [red_read] about him in newspapers.
- 5. The Wright brothers had their own ideas, [too to].



Learning About Language





Write About It

MY LEARNING GOALS

I can

o write a news story.

use words to answer questions.

Newspapers are full of stories. The stories tell readers about things that are happening. They tell who, what, why, when, where, and how.

Pretend you are watching Otto Lilienthal fly. Your job is to write a news story about him. Be sure to tell readers all they need to know.

Plan My Writing

Answer the questions who, what, why, when, where, and how. Then use your answers to write a story.

Who is the story about? Offo Lilienthol
What is the story about? <u>flying a glider</u>
Why did it happen?
When did it happen?
Where did/it happen?
How did it happen?

Write About It



NEWS

Today is a very special day. A man named _

flew a glider.

He flew at _____

Gliders are _____

This man learned all about gliders by

He wanted to

He made

Now, he is _____

The glider flew! It looked like _____