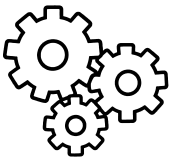
Name _____ Date _____



Computing Pioneers

Read about two pioneers. Then answer the questions.

Ada Lovelace

Ada Lovelace was born in London in 1815. Her mother made sure she studied math and science. As a young woman, Ada met Charles Babbage. He had planned a machine that could do math by itself, but it was never built. In 1843, Ada wrote long notes about the machine. In them, she set out the steps it would follow to work out a hard list of numbers. Many people call those steps the first computer **program**.

1. Charles Babbage's machine was built and used. **true** **false**

2. Ada wrote her notes about the machine in ____ **1843** **1815** **1947**

Grace Hopper

Grace Hopper was born in New York City in 1906. She taught math at a college. In 1943, she joined the U.S. Navy, and she wrote programs for one of the first big computers. In 1947, the team she worked with found a moth stuck inside a computer. They taped it into their notebook and wrote, "First actual case of bug being found." She also made programs that let people give a computer orders in words, not just in numbers.

3. What did the team find inside a computer? **a moth** **a mouse** **a coin**

4. Hopper made programs that let people give a computer orders in words. **true** **false**

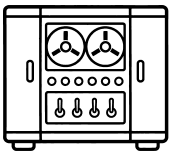
5. Ada Lovelace and Grace Hopper both wrote programs. How was Ada's work different?

_____

_____

© 2026 Eggroll Games

Name _____ Date _____



Computing Pioneers

Read about two pioneers. Then answer the questions.

Dorothy Vaughan

Dorothy Vaughan was a math teacher. In 1943, she went to work at a lab that later became part of NASA. She was hired as a **computer**. Back then, a computer was a person who worked out math problems! Black women who did this job had to work in a group of their own. In 1949, Vaughan became its leader. She was the first Black person to lead a group at the lab. When electronic computers came, she learned a computer language called FORTRAN on her own. Then she taught it to others at the lab.

1. When Vaughan started at the lab, a computer was ___ **a machine** **a person** **a book**

2. Vaughan learned FORTRAN on her own. **true** **false**

Margaret Hamilton

Margaret Hamilton led a team that wrote the code for the computers on the Apollo spacecraft. In July 1969, Apollo 11 flew to the moon. As it came down to land, alarms went off. The computer had too many jobs to do at once! Hamilton's team had planned for that. Their code dropped the jobs that mattered less and kept the most important ones going. The landing went on safely.

3. Why did the alarms go off before the landing?

_____

4. Apollo 11 had to turn back without landing. **true** **false**

5. Which of these two pioneers would you like to meet? Why?

_____

_____

© 2026 Eggroll Games

Name _____ Date _____



Computing Pioneers

Read about two pioneers. Then answer the questions.

Jerry Lawson

Jerry Lawson grew up in New York City. As a boy, he fixed TVs and built his own radio. In 1976, he led the team that made the Fairchild Channel F. It was the first home video game system to use game **cartridges** with programs on chips. Before that, most game systems could play only the games built into them. Lawson was one of very few Black engineers in the game business then.

1. As a boy, Lawson fixed TVs and built his own radio. **true** **false**

2. Before cartridges, most game systems played only the games built into them. **true** **false**

Tim Berners-Lee

Tim Berners-Lee grew up in London. His parents both worked on one of the first computers. In 1989, at a science lab in Switzerland, he wrote a plan for people to share pages between computers all over the world. He later called it the **World Wide Web**. By the end of 1990, the first web page was running. In 1993, the lab made the web free for anyone to use.

3. Berners-Lee called his plan the World Wide Web. **true** **false**

4. The web was made free for anyone to use in ____ **1990** **1993** **1989**

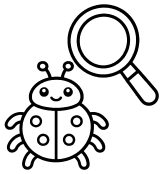
5. Lawson and Berners-Lee each made something new. What did each one make?

_____

_____

© 2026 Eggroll Games

Name _____ Date _____



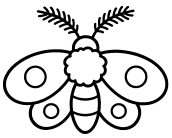
Computing Pioneers

Draw a line from each coding word to what it means.

algorithm	to find and fix the mistakes in a program
program	the words and symbols a program is written in
code	steps that repeat
bug	a list of steps that do a job or solve a problem
debug	a set of steps written for a computer to follow
loop	a mistake in a program

© 2026 Eggroll Games

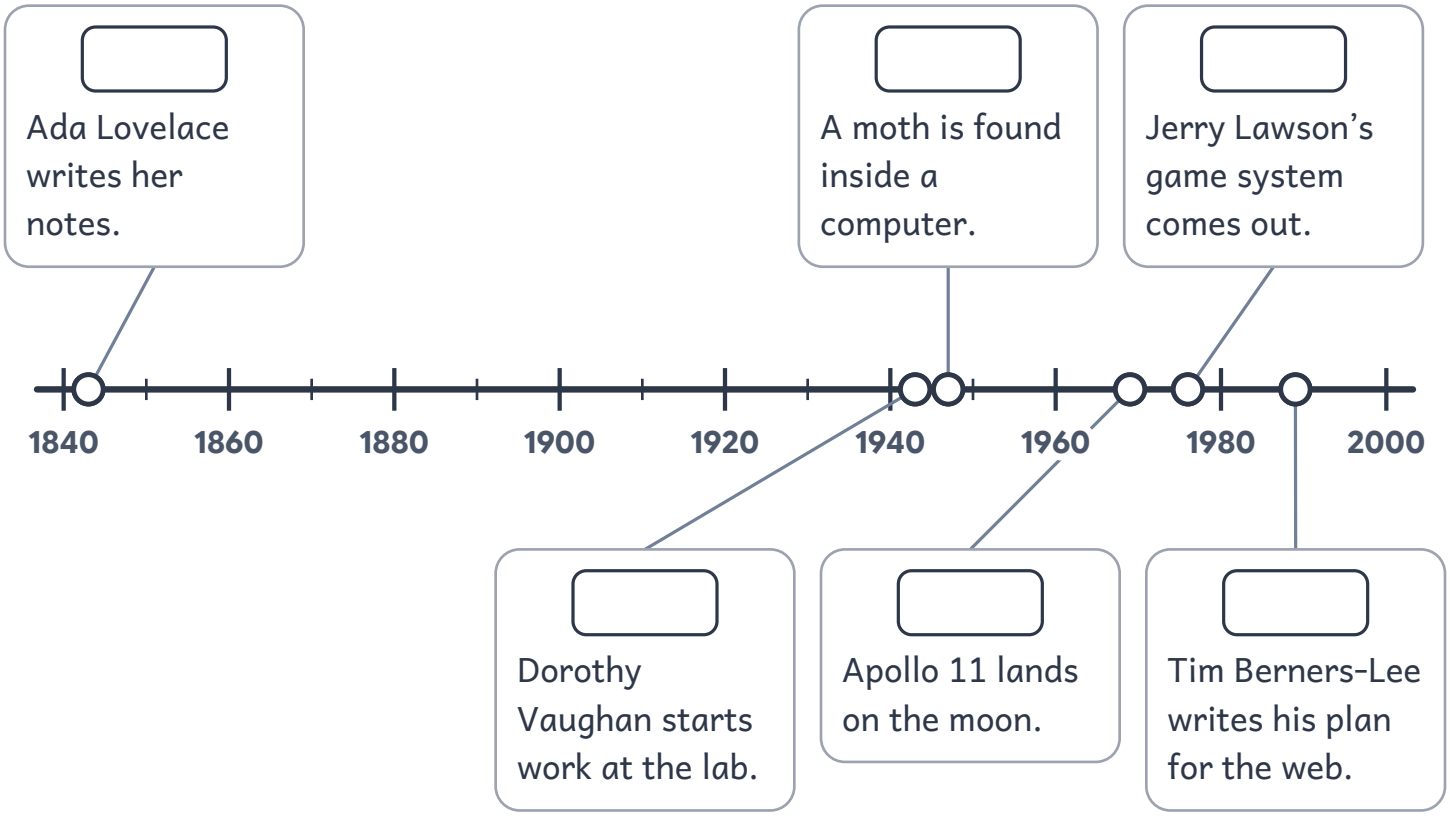
Name _____ Date _____



Computing Pioneers

Write the year of each event. Then answer the questions.

Years: **1843** **1943** **1947** **1969** **1976** **1989**



1. How many years after Ada Lovelace wrote her notes was the moth found inside a computer? _____ years

2. How many years after Apollo 11 landed did Tim Berners-Lee write his plan for the web? _____ years

© 2026 Eggroll Games

Name _____ Date _____

Computing Pioneers

Invent a program of your own. Plan it here.

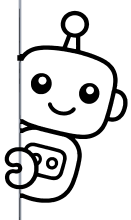
What would you like a computer to do for you, your class or your town? Plan a program to do it.

My program's name

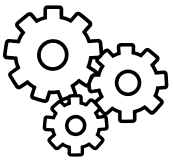
The problem it solves and who will use it

The steps it follows First, Next, Then, Last

A bug that could happen and how I would fix it



© 2026 Eggroll Games



Computing Pioneers

Read about two pioneers. Then answer the questions.

Ada Lovelace

Ada Lovelace was born in London in 1815. Her mother made sure she studied math and science. As a young woman, Ada met Charles Babbage. He had planned a machine that could do math by itself, but it was never built. In 1843, Ada wrote long notes about the machine. In them, she set out the steps it would follow to work out a hard list of numbers. Many people call those steps the first computer **program**.

1. Charles Babbage's machine was built and used. **true** **(false)**

2. Ada wrote her notes about the machine in ____ **(1843)** **1815** **1947**

Grace Hopper

Grace Hopper was born in New York City in 1906. She taught math at a college. In 1943, she joined the U.S. Navy, and she wrote programs for one of the first big computers. In 1947, the team she worked with found a moth stuck inside a computer. They taped it into their notebook and wrote, "First actual case of bug being found." She also made programs that let people give a computer orders in words, not just in numbers.

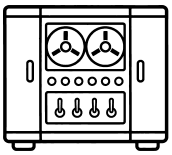
3. What did the team find inside a computer? **(a moth)** **a mouse** **a coin**

4. Hopper made programs that let people give a computer orders in words. **(true)** **false**

5. Ada Lovelace and Grace Hopper both wrote programs. How was Ada's work different?

Ada wrote for a machine that was never built.

© 2026 Eggroll Games



Computing Pioneers

Read about two pioneers. Then answer the questions.

Dorothy Vaughan

Dorothy Vaughan was a math teacher. In 1943, she went to work at a lab that later became part of NASA. She was hired as a **computer**. Back then, a computer was a person who worked out math problems! Black women who did this job had to work in a group of their own. In 1949, Vaughan became its leader. She was the first Black person to lead a group at the lab. When electronic computers came, she learned a computer language called FORTRAN on her own. Then she taught it to others at the lab.

1. When Vaughan started at the lab, a computer was ____ **a machine** **(a person)** **a book**

2. Vaughan learned FORTRAN on her own. **(true)** **false**

Margaret Hamilton

Margaret Hamilton led a team that wrote the code for the computers on the Apollo spacecraft. In July 1969, Apollo 11 flew to the moon. As it came down to land, alarms went off. The computer had too many jobs to do at once! Hamilton's team had planned for that. Their code dropped the jobs that mattered less and kept the most important ones going. The landing went on safely.

3. Why did the alarms go off before the landing?

The computer had too many jobs to do at once.

4. Apollo 11 had to turn back without landing. **true** **(false)**

5. Which of these two pioneers would you like to meet? Why?

Margaret Hamilton, because her code helped land Apollo 11.

© 2026 Eggroll Games



Computing Pioneers

Read about two pioneers. Then answer the questions.

Jerry Lawson

Jerry Lawson grew up in New York City. As a boy, he fixed TVs and built his own radio. In 1976, he led the team that made the Fairchild Channel F. It was the first home video game system to use game **cartridges** with programs on chips. Before that, most game systems could play only the games built into them. Lawson was one of very few Black engineers in the game business then.

1. As a boy, Lawson fixed TVs and built his own radio. **(true)** **false**

2. Before cartridges, most game systems played only the games built into them. **(true)** **false**

Tim Berners-Lee

Tim Berners-Lee grew up in London. His parents both worked on one of the first computers. In 1989, at a science lab in Switzerland, he wrote a plan for people to share pages between computers all over the world. He later called it the **World Wide Web**. By the end of 1990, the first web page was running. In 1993, the lab made the web free for anyone to use.

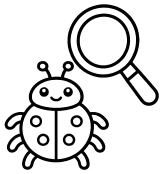
3. Berners-Lee called his plan the World Wide Web. **(true)** **false**

4. The web was made free for anyone to use in ____ **1990** **(1993)** **1989**

5. Lawson and Berners-Lee each made something new. What did each one make?

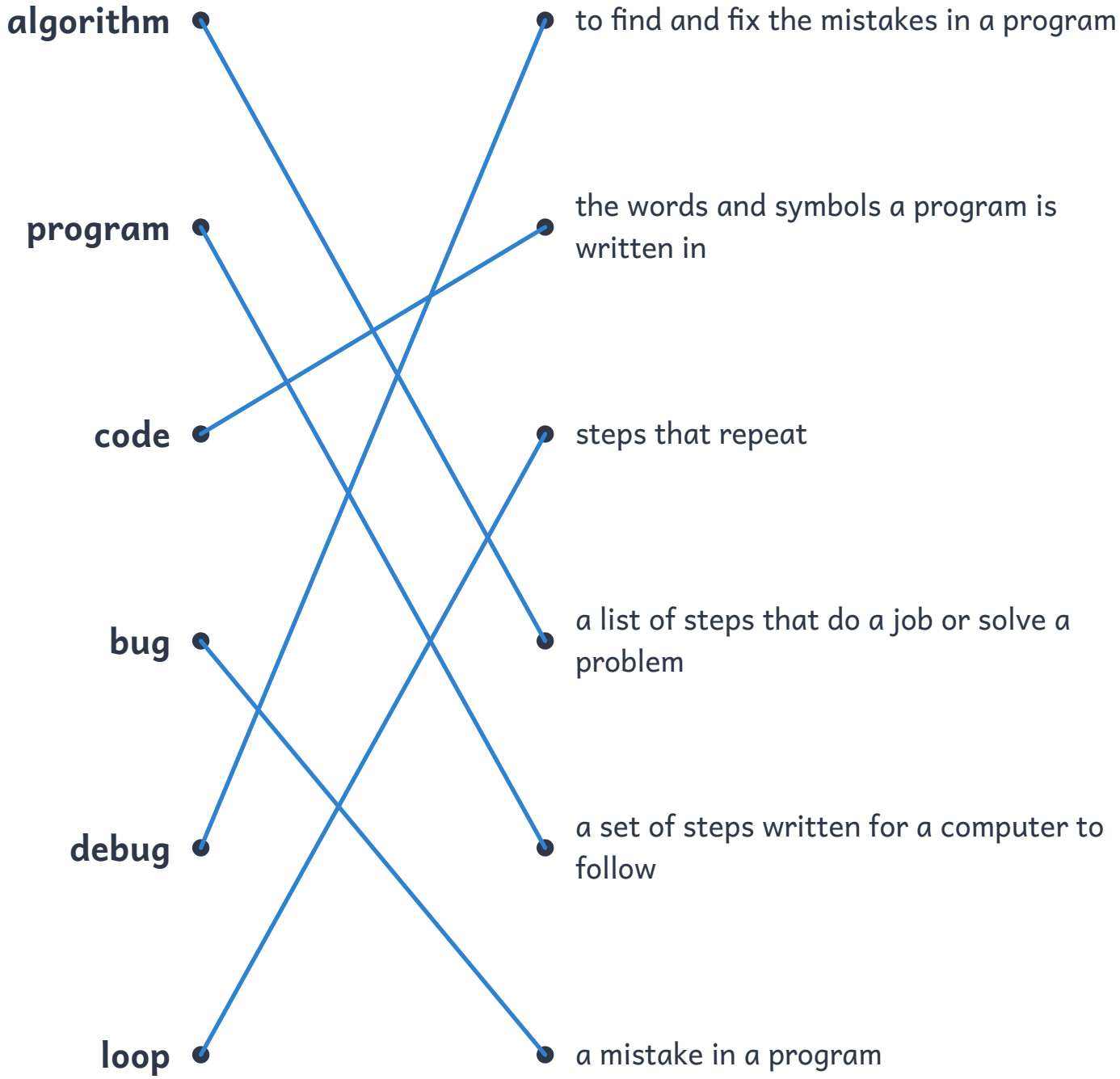
Lawson made a game system, and Berners-Lee made the web.

© 2026 Eggroll Games

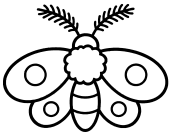


Computing Pioneers

Draw a line from each coding word to what it means.



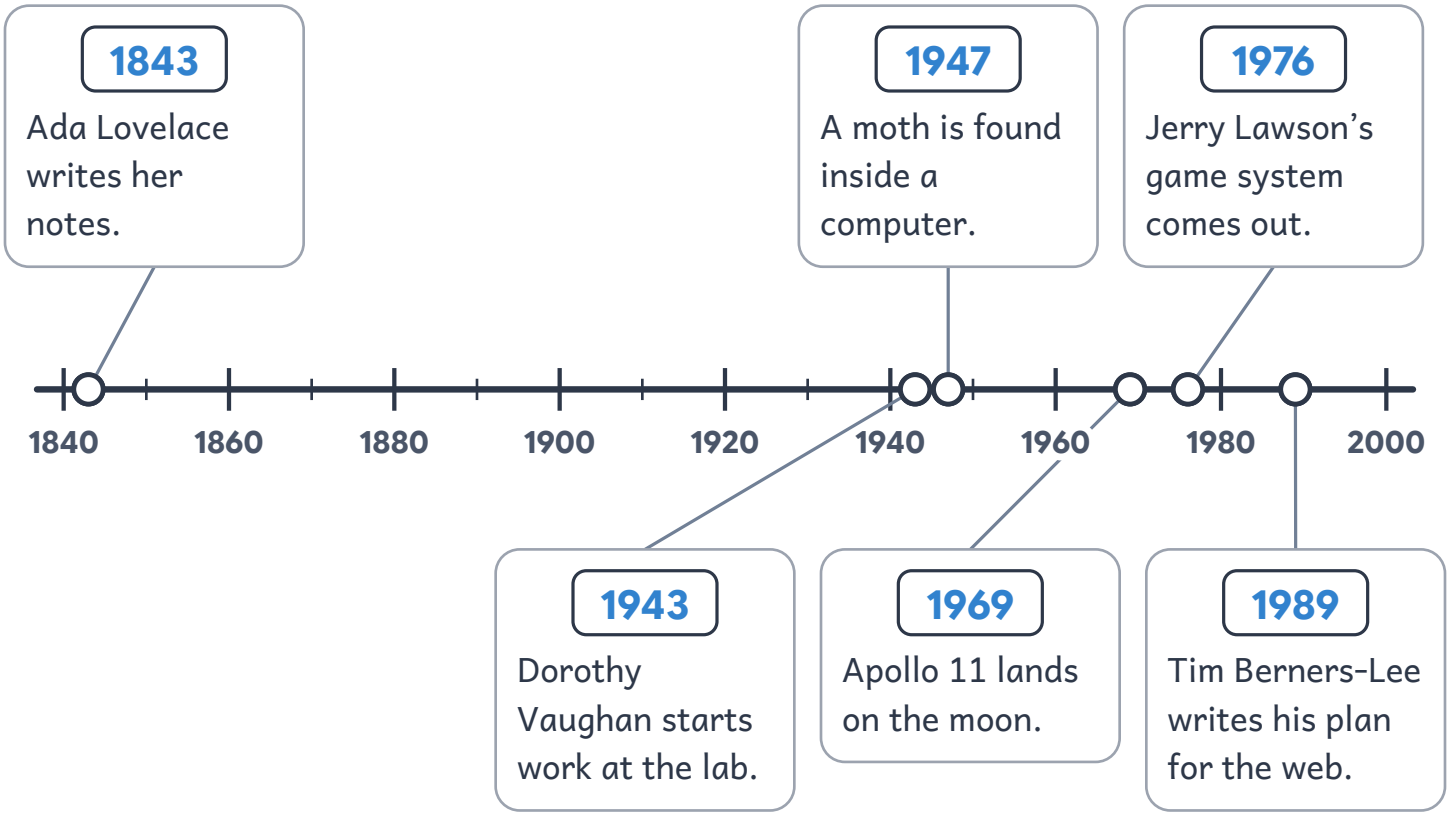
© 2026 Eggroll Games



Computing Pioneers

Write the year of each event. Then answer the questions.

Years: 1843 1943 1947 1969 1976 1989



1. How many years after Ada Lovelace wrote her notes was the moth found inside a computer?

104 years

2. How many years after Apollo 11 landed did Tim Berners-Lee write his plan for the web?

20 years

© 2026 Eggroll Games