



Lesson: The Invention of Video Games

(To follow Amplify CKLA 4, Unit 4, Lesson 2)

At a Glance

This reading comprehension lesson introduces students to Ralph Baer, the New Hampshire inventor who developed the first video game system.

Primary Focus Objectives

- Students identify features of non-fiction text.
- Students read a short non-fiction piece about Ralph Baer.
- Students complete a 5Ws comprehension graphic organizer and reflection question.

Formative Assessment Standards

• Completion of graphic organizer and reflection question

CCSS.ELA-LITERACY.RI.4.1

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-LITERACY.RI.4.2

Determine the main idea of a text and explain how it is supported by key details; summarize the text.

CCSS.ELA-LITERACY.W.4.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

Materials

- Focus Text: Moose on the Loose Unit 17: Learn It! "The Economy," page 3
- Optional: Focus Text Facts: Who Was Ralph Baer?
- Vocabulary Card: revolutionary
- Graphic Organizer: <u>5Ws: Video Games</u>

Time Needed

One to two 30-40 minute class sessions

Learning Activity

- Preview the text. Remind students that they have been learning about major inventors as part of their "Eureka! Student Inventor" Unit for Amplify. Explain that they'll read a short non-fiction piece that introduces them to a New Hampshire inventor responsible for something it's hard to imagine the world without. Direct students to Moose on the Loose Unit 17: New Hampshire Today, Learn It! "The Economy," page 3. As a group, examine the layout of the page. Together, identify headings, images, captions, and key words. (5 minutes)
- 2. **Read the text.** Give students time to read the selection independently or in small groups. (15 minutes)
- 3. Complete the graphic organizer. Provide students with "5Ws: Video Games" and give them time to answer the prompts. (15 minutes)
- 4. **Vocabulary Card and reflection.** After students complete the graphic organizer, distribute or project the vocabulary card. Review the definition. Then, ask students to write a brief paragraph, using evidence from their reading, explaining why Ralph Baer's invention can be described using the vocabulary word. (20 minutes)





Educator Rationale and Answer Guide

Connection to Amplify

This lesson reinforces the learning objective of Amplify CKLA 4, Unit 4, Lesson 2: "Those Fascinating Judges-Research." As in that lesson, this lesson has students read about an important inventor, identify features of non-fiction, and use details from the text to explain its meaning. The text used for this lesson focuses on Ralph Baer, an inventor from Manchester, New Hampshire, who developed the first video game system.

Preview and read the text

The Learn It! selection features: a heading (Video Games), an image of a Magnavox Odyssey with a caption, and a name in bold (Ralph Baer). Let students know they can click on the name and the image to get more information. If you choose to use the Focus Text Facts page instead of the online Learn It! selection, help students identify the heading and the subheading, the captions for the photographs, and the two key words in bold. If students are unfamiliar with the word "prototype," explain that a prototype is an early version of an invention.

This is a good place to pause if dividing the lesson across two class sessions.

Complete the graphic organizer

Encourage students to use details from the text to write their answers to each "W" prompt. At minimum students should explain that: the video game was invented in the 1960s and sold to the public for the first time in 1972; it was invented by Ralph Baer who worked in Nashua, New Hampshire and lived in Manchester, New Hampshire; it was a system that connected to a TV, and people could play a few types of games; it was completely original, and nothing like it had been created before.

Vocabulary Card and Reflection

The Vocabulary Card word "revolutionary" has been selected to help students think about the impact of invention and innovation. It's also useful to introduce this word now, in advance of Amplify Unit 7: American Revolution, so that students truly understand why that period in our history is called a revolution. Things that are revolutionary cause extraordinary change.

After discussing the Vocabulary Card, ask students to write a short paragraph explaining why Ralph Baer's invention should be described as revolutionary. They should use details learned from their reading to support their reasoning.

This is also an opportunity for students to think about intersection of economic opportunity and consumers. What need or want did this new product—video games—fulfill? What makes it possible for consumers to buy things like video games?



NAME:	

THE 5-W QUESTIONS: VIDEO GAMES

There are five question words that begin with "W" that every curious person should know: who, what, where, when, and why. Answer the questions about the event in the box, and you'll be well on your way to understanding the historical events that are our history.

Invention of the Video Game

When did it happen?	
Where did it take place?	
Who was involved?	
What was it?	
Why was it important?	



Focus Text Facts

Who was Ralph Baer?

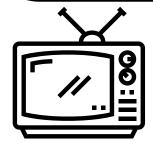
Get to know New Hampshire's "Father of Video Games"!



If you enjoy gaming, it's thanks to the **revolutionary** thinking of someone born over 100 years ago! Ralph Baer was born in Germany on March 8, 1922. His family was Jewish and experienced terrible discrimination under laws created by Germany's Nazi government. When Ralph was a teenager, his family was able to escape to the United States just before the start of World War II.

Ralph served in the United States Army during World War II. After the war, he earned a Bachelor of Science degree from the American Television Institute of Technology. Ralph was a talented engineer and got a job with a company in Nashua, New Hampshire that developed electronics for the military.





In his spare time, Ralph thought a lot about how the technology he developed at work could be used with a new technology that millions of people across the United States were enjoying in their homes everyday: television. Ralph wondered if, instead of just watching television, people could *play* with television.

So, Ralph started designing what he called a "gaming" system that would allow a person to move images on a television screen. After many years and tests, in 1967 Ralph and his colleagues finished a **prototype** for the first home video game console. It was nicknamed the "Brown Box." It connected to a television. Cards were inserted into the box to play games like ping pong, checkers, soccer, and golf.



The 1967 "Brown Box" and game cards



Ralph Baer's workshop at the Smithsonian.

A large company called Magnavox bought Ralph's prototype in 1972 and sold it as the Magnavox Odyssey. Soon, many other companies developed their own video game systems inspired by the "Brown Box." Ralph spent the rest of his life living with his family in Manchester, New Hampshire. He received the National Medal of Technology in 2004 and his workshop is now part of the collection at the Smithsonian Institution in Washington, D.C.

REVOLUTIONARY

Part of speech: adjective

Definition: causing a complete or dramatic change

How to use it: The invention of the refrigerator was **revolutionary** for food storage.