

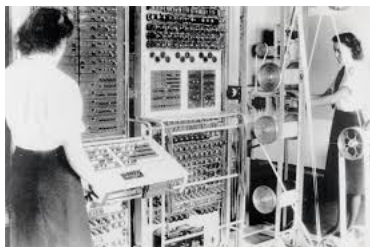
Unit 3—A History of Computing...

HCCS STEM—Computer Science, IT, Engineering, Food/Nutrition, Business Studies

What do I need to be able to do?

1. I can **build a timeline that tells the History of Computing**, which is the primary project for this unit
2. I can **create a high-quality presentation** for this timeline by ensuring it has an enticing and consistent theme, uses a wide range of images and GIFs, and includes comprehensive information about the pioneers of computing
3. I can **demonstrate my understanding of computing history** through my project work and engage in peer assessment to discuss the criteria for effectively telling this history.

Colossus was a giant, secret computer built during World War II at Bletchley Park. Its special job was to help break super complicated German codes, specifically those made by their Lorenz machines. By doing this, Colossus gave the Allies vital information that helped them win the war much faster.



The **World Wide Web**, which Sir Tim Berners-Lee helped create, is like all the houses, shops, and exciting places you can visit along those roads – essentially, **it's the collection of websites and pages you see**. So, while the **Internet is the physical** way computers talk to each other, the World Wide Web is the amazing information system that lives on that network, making it easy for us to share and find stuff.

Keywords

Timeline: The central project of this unit requires you to build a timeline that tells the History of Computing

Pioneer: A pioneer is someone who is among the first to explore or develop a new area of knowledge or activity, such as Charles Babbage

Feasibility: If something can be done feasibly, it means it is possible to do it without too much difficulty, as demonstrated by the Manchester Baby's successful storage and execution of programs, proving the feasibility of electronic digital computers

Innovations: Innovations are new ideas, inventions, or ways of doing things that improve our lives or make tasks easier, and the Manchester Baby's innovations in electronic memory and stored programs laid the foundation for modern computers

Legacy: A legacy is something handed down from the past, like achievements or knowledge, that continues to influence people today, such as Charles Babbage's pioneering work influencing modern computers and technology

Electronic Computing: This refers to the birth and acceleration of computers that utilise electronic components, a development significantly accelerated during World War 2 with machines like the Colossus

Personal Computer: This describes a concept of computers that differed from earlier, larger machines, sparking a revolution led by figures like Bill Gates and Steve Jobs

World Wide Web: This is a wide-area hypermedia information retrieval initiative, whose creation and impact are explored in the unit, with Tim Berners-Lee identified as its inventor

Bill Gates made personal computing accessible to everyone by creating the widely used Windows operating system and Microsoft Office software. Steve Jobs, on the other hand, revolutionized how we interact with technology through innovative and user-friendly devices like the Mac, iPod, iPhone, and iPad.

A good assessment piece for this unit is primarily your **timeline that tells the History of Computing**. To make it excellent, your presentation needs to be **enticing, interesting, and fun**, with a **consistent theme** throughout. You should use a **wide range of images** to make it **engaging** and provide information about the **pioneers of computing**, explaining who they were, what they did, and when. Ultimately, it needs to **demonstrate your understanding of computing history** through well-organised, accurate writing that is mostly in your own words

10 Test your understanding questions

Here are 10 multiple-choice questions summarising the whole unit:

1. What was one of the **earliest tools used for calculation**, as mentioned in the "Fingers to Gears" lesson?
A) Personal Computer B) Abacus C) Colossus D) Smartphone
2. Who is known as a **pioneer in computing** for designing early mechanical computers, which influenced modern technology?
A) Grace Hopper B) Tim Berners-Lee C) Charles Babbage D) Bill Gates
3. Which major global event significantly **accelerated the development of electronic computers**, as discussed in the unit's second lesson?
A) The invention of the internet B) The Social Media Revolution C) World War 2 D) The space race
4. What significant achievement did the **Manchester Baby** make in 1948, marking a key milestone in computer history?
A) It was the first computer to connect to the internet. B) It **successfully stored programs for the first time**, demonstrating the feasibility of electronic digital computers. C) It created the first graphical user interface. D) It launched the personal computer revolution.
5. Which female figure's contributions to **programming and software development** were specifically highlighted as an "early coder" in the unit?
A) Annie Easley B) Grace Hopper C) Katherine Johnson D) Ada Lovelace
6. What term is used to describe individuals like Annie Easley and Katherine Johnson, who performed complex calculations before electronic computers were widespread and contributed to scientific efforts?
A) Computer scientists B) Electronic engineers C) Human computers D) Digital designers
7. Which two individuals are widely recognized as key figures in starting the **Personal Computer Revolution**?
A) Tim Berners-Lee and Vint Cerf B) Charles Babbage and Ada Lovelace C) Bill Gates and Steve Jobs D) Larry Page and Sergey Brin
8. Who is credited in the unit as the **inventor of the World Wide Web**?
A) Mark Zuckerberg B) Jeff Bezos C) Tim Berners-Lee D) Steve Wozniak
9. Which major company, founded by **Larry Page and Sergey Brin**, revolutionized how people find information online?
A) Facebook B) Amazon C) Google D) Apple
10. When creating your "History of Computing" timeline, what is a key characteristic mentioned for a **good presentation theme**?
A) It should be very short and simple. B) It should only use one type of image. C) It needs to be enticing, interesting, fun, and consistent throughout D) It must only include text with no images.

10 Test your understanding answers

1:1 B, 2: C, 3: C, 4: A, 5: B, 6: C, 7: C, 8: C, 9: C, 10: C