

Connections Academy®

TECHNOLOGY

TRIVIA QUIZ 2021



Here are 20 trivia questions about technology to share with your kids. We start with some general questions and later focus on computer technology. The correct answers are on the pages that follow the questions.

1. WHERE DID THE FIRST POWERED AIRPLANE FLIGHT TAKE PLACE?

- A. Bridgeport, Connecticut
- B. Dayton, Ohio
- C. Kitty Hawk, North Carolina
- D. Paris, France

2. SELECT THE CORRECT CHRONOLOGICAL ORDER OF THESE MAJOR TECHNOLOGICAL ADVANCES:

- A. Compass, gunpowder, printing, windmill
- B. Gunpowder, windmill, compass, printing
- C. Windmill, compass, gunpowder, printing
- D. Printing, compass, windmill, gunpowder

3. WHEN WAS THE FIRST FULL-LENGTH TELEVISION SHOW BROADCAST?

- A. 1928
- B. 1938
- C. 1948
- D. 1958

4. SELECT THE CORRECT CHRONOLOGICAL ORDER OF THESE NASA SPACE PROGRAMS:

- A. Artemis, Gemini, Mercury, Apollo
- B. Gemini, Mercury, Apollo, Artemis
- C. Mercury, Gemini, Apollo, Artemis
- D. Artemis, Mercury, Gemini, Apollo

5. WHO SAID, “THAT’S ONE SMALL STEP FOR (A) MAN, ONE GIANT LEAP FOR MANKIND.”

- A. Buzz Aldrin
- B. Neil Armstrong
- C. Michael Collins
- D. Walter Cronkite

6. WHAT TELESCOPE DID NASA LAUNCH IN 1990 TO HELP SCIENTISTS LEARN MORE ABOUT OUR SOLAR SYSTEM?

- A. Hubble Space Telescope
- B. International Space Telescope
- C. Refracting Telescope
- D. Reversing Telescope

7. WHAT WAS THE FIRST COMMERCIALY AVAILABLE PERSONAL COMPUTER NAMED?

- A. Altair 8800
- B. Apple I
- C. Commodore PET
- D. TRS-80

8. THE INTERNET GREW OUT OF WHAT EXPERIMENTAL COMPUTER NETWORK?

- A. Cambridge University's EDSAC
- B. IBM's UNIVAC
- C. National Science Foundation's NSFNET
- D. U.S. Defense Department's ARPANET

9. SELECT THE CORRECT CHRONOLOGICAL ORDER FOR RELEASE OF THESE POPULAR GAME CONSOLES:

- A. Xbox, PlayStation, Nintendo Entertainment System
- B. Nintendo Entertainment System, PlayStation, Xbox
- C. PlayStation, Nintendo Entertainment System, Xbox
- D. Nintendo Entertainment System, Xbox, PlayStation

10. WHERE DID WE GET THE TERM “CYBERSPACE” FROM?

- A. Early Japanese anime
- B. 1980s science fiction
- C. RAND Corporation
- D. World Wide Web Consortium (W3C)

11. WHAT SCIENCE FICTION WRITER IS CREDITED WITH THE THREE LAWS OF ROBOTICS?

- A. Isaac Asimov
- B. Robert A. Heinlein
- C. Frank Herbert
- D. Ursula K. Le Guin

12. THE LED LIGHTBULB IS CONSIDERED PERHAPS ONE OF THE TOP TECHNOLOGICAL ADVANCES OF THE 21ST CENTURY. WHAT DOES “LED” STAND FOR?

- A. Long-lasting electronic display
- B. Light-emitting diode
- C. Liquid energy device
- D. The inventor was a huge fan of the rock band Led Zeppelin.

13. WE ALL HAVE APPS, OR “APPLICATION” SOFTWARE, ON OUR COMPUTERS, TABLETS, SMARTPHONES, ETC. ABOUT HOW MANY APPS ARE AVAILABLE TO THE PUBLIC WORLDWIDE?

- A. 2.2 million
- B. 3.5 million
- C. 6.2 million
- D. 10.5 million

14. WHICH OF THE FOLLOWING IS NOT AN ONLINE AUDIO FORMAT?

- A. AAC
- B. MP4
- C. FLAC
- D. WAV

15. YOU ARE RENTING AN OFFICE BUILDING AND ONE OF THE FEATURES LISTED IS “UPS.” WHAT IS UPS?

- A. United Parcel Service
- B. Uninterruptible power supply
- C. Unique paint scheme
- D. Universal partitioning system

16. WHICH OF THESE COMPUTER USER AUTHENTICATIONS IS NOT A BIOMETRIC METHOD?

- A. Face ID
- B. Touch ID
- C. Username and password
- D. Voice recognition

17. IN COMPUTER PROGRAMMING, A STORED VALUE THAT CAN CHANGE IS CALLED WHAT?

- A. Array
- B. Function
- C. Integer
- D. Variable

18. ARTIFICIAL INTELLIGENCE THAT “LEARNS” OVER TIME IS CALLED WHAT?

- A. Artificial biometry
- B. Machine learning
- C. Natural intelligence
- D. Robotic programming

19. WHAT IS THE PURPOSE OF AN NSP?

- A. To build and maintain the infrastructure of the Internet.
- B. To establish wireless communication standards.
- C. To prevent unauthorized access to local area networks.
- D. To standardize and enforce Internet privacy rules.

20. RARE-EARTH ELEMENTS ARE USED IN WHICH OF THE FOLLOWING DEVICES?

- A. Cellular telephones
- B. Computer hard drives
- C. Electric and hybrid vehicles
- D. All of the above

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ANSWERS

1. KITTY HAWK, NORTH CAROLINA (C). Orville and Wilbur Wright, two brothers from Dayton, Ohio, are generally credited with the first heavier-than-air manned flight at Kitty Hawk on the morning of December 17, 1903. Some credit Alberto Santos-Dumont with the first powered flights in Paris in 1906 because his wheeled craft took off unassisted, unlike the Wright Flyer, which was launched off a rail and aided by strong winds. Others say Gustave Whitehead's flight over Bridgeport and Fairfield, Conn., on August 18, 1901, was the first manned airplane flight, but it is not well documented.

2. GUNPOWDER, WINDMILL, COMPASS, PRINTING (B). Alchemists in China invented gunpowder by 850 CE. The first known windmills were in Persia in 950, though it has been speculated that the windmill may have been invented independently in Persia and Europe. The first definitive mention of a magnetic compass was in a book finished in China in 1044. Johannes Gutenberg completed a printing of the Bible, the first book printed in the West using movable type, in 1455.

3. 1928 (A). A one-act drama called "The Queen's Messenger" by J. Hartley Manners became the first full-length program broadcast in the U.S. when WGY in Schenectady, N.Y., aired it on September 11, 1928. By 1939, NBC had 15 hours of programming a week, and TV gained wider viewership in the late 1940s after World War II. The "Golden Age of Television" in the 1950s solidified the medium's popularity.

4. MERCURY, GEMINI, APOLLO, ARTEMIS (C). Six Mercury missions (1961–1963) were NASA's first manned space flights. In 10 Gemini missions (1965–1966), astronauts learned to rendezvous with and dock spacecraft and to walk in space. The 11 Apollo missions (1968–1972) began with tragedy but took Americans to the moon six times. Artemis (2017–) is NASA's current mission to return astronauts to the moon by the mid-2020s.

5. NEIL ARMSTRONG (B). Armstrong made the statement as he stepped from the Lunar Excursion Module (LEM) to become the first person on the moon on July 20, 1969. He was soon followed by Buzz Aldrin on the moon as Michael Collins orbited overhead in the Apollo 11 Command Module. Walter Cronkite was an influential television news anchor and strong supporter of the U.S. space program.

6. HUBBLE SPACE TELESCOPE (A). Created by Edwin Hubble to observe comets and planets, the Hubble Space Telescope has been orbiting the earth for over 31 years. Thanks to its orbital view of space, researchers are able to see farther away than they can with earth-based telescopes. It's even revealed galaxies—far, far away—that otherwise wouldn't have been seen at all.

7. ALTAIR 8800 (A). The MITS Altair 8800, introduced in Popular Electronics magazine and sold as a kit in 1975, is widely considered the first viable personal computer. It was quickly followed by the IMSAI 8080, an Altair clone. Apple I, Apple's only "kit" computer, came out in 1976. The personal computer industry as we know it came to be in 1977 with the release of the Apple II, Radio Shack's TRS-80, and the Commodore PET.

8. U.S. DEFENSE DEPARTMENT'S ARPANET (D). The Advanced Research Projects Agency Network was the forerunner of the Internet. It was developed in the late 1960s to link computers at Pentagon-funded research institutions. The military was seeking a computer communications system that had no base of operations that could be attacked and destroyed. EDSAC and UNIVAC were early computers. The NSFNET was a program of coordinated projects to promote advanced research and education networking.

9. NINTENDO ENTERTAINMENT SYSTEM, PLAYSTATION, XBOX (B). The Nintendo Entertainment System was first released in 1985, Sony's PlayStation launched in 1995, and Microsoft's Xbox debuted in 2001. The first home video game console was the Odyssey, which was manufactured by Magnavox and released in 1972. It was followed in 1975 by the much more popular home version of Pong by Atari.

10. 1980S SCIENCE FICTION (B). "Cyberspace," the term that refers to the virtual computer world, was first used by William Gibson in 1982 in a story published in Omni magazine and then in his novel "Neuromancer." Gibson's book describes cyberspace as the creation of a computer network in a world filled with artificially intelligent beings. RAND Corporation is a nonprofit global policy think tank. The W3C is an international organization that develops web standards.

11. ISAAC ASIMOV (A). Asimov introduced the Three Laws of Robotics in his 1942 short story "Runaround" (included in the 1950 collection "I, Robot"). The Three Laws are:

- A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
- A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

12. LIGHT-EMITTING DIODE (B). A light-emitting diode is a semiconductor light source that emits light when current flows through it. Incandescent light bulbs pass electricity through thin filament wire, which heats the filament until it glows. LED bulbs use 20 percent of the energy used by incandescent light bulbs and can last 25,000 hours with average use—more than a decade.

13. 6.2 MILLION (C). As of the first quarter of 2021, the Google Play Store offered 3.48 million apps and the Apple App Store offered roughly 2.22 million, according to Statista. The Amazon Appstore offers approximately 460,000 Android apps to worldwide audiences, and Tencent Appstore, a third-party Android app store in China, offers over 43,840 apps. (Numbers may fluctuate as stores regularly remove poorly performing content.)

14. MP4 (B). MP4 is an online video format. MP3 is a popular online audio format, along with AAC, FLAC, ALAC, WAV, and DSD.

15. UNINTERRUPTIBLE POWER SUPPLY (B). An uninterruptible power supply is a system that provides emergency power instantaneously after power interruptions. A UPS is not an emergency power backup. It simply provides enough electricity to power computers or other critical devices long enough to properly shut them down, back up data, or start a proper emergency power source, like a generator.

16. USERNAME AND PASSWORD (C). “Biometrics” refers to body measurements. A biometric method of identifying a user relies on distinctive, measurable characteristics that can be used to label and describe the individual, such as the look of their face or sound of their voice. Systems that use a name and password or personal identification number (PIN) are known as knowledge-based authentication systems.

17. VARIABLE (D). In mathematics, a variable is a symbol or letter, such as “x” or “y,” that represents a value. In computer programming, variables are names given to memory locations used to store values in the program. A typical program consists of instructions that tell the computer what to do and data that the program uses when it is running. The data consists of constants or fixed values that never change, and variable values, which are supplied by a program’s user.

18. MACHINE LEARNING (B). Machine learning (ML) is a type of artificial intelligence (AI) that “learns” or adapts over time, such as by scanning large amounts of data. As the ML program scans the data, it identifies patterns and develops predictive models, i.e., if this happens, this should happen next. For example, machine learning enables streaming sites to give you song or movie recommendations because the ML program learns that many people who liked one also liked the other.

19. TO BUILD AND MAINTAIN THE INFRASTRUCTURE OF THE INTERNET. (A). Network service providers (NSPs), such as Google, AT&T, and Verizon, build and maintain basic infrastructure, like fiber optic lines between hubs or “internet exchanges” that route Internet traffic around the world. They also sell bandwidth or network access to users. The global network created by multiple NSPs allows data to flow seamlessly between computer systems around the world.

20. ALL OF THEM: A, B, C, AND D. Rare-earth elements (REEs) are necessary components of more than 200 products across a wide range of applications, especially high-tech consumer products and defense applications, like guidance systems, lasers, and radar and sonar systems. China, the world’s largest producer of REEs and virtually the only producer of the high-value heavy REEs, strictly limits the production and export of REEs.