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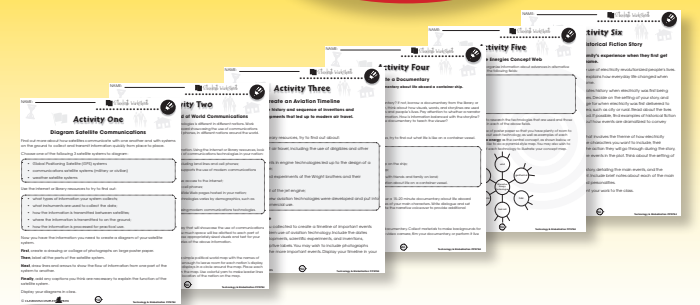
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The World Wide Web



1. Use a dictionary to look up the word INTERNET. Write the definition on the spaces provided.

The definition of **internet** is:

2. Think for a moment about how people use the internet for information and communications.

- a) List three ways people can use the internet to find out information.

- b) List three ways that people use the internet to communicate with one another.

The World Wide Web



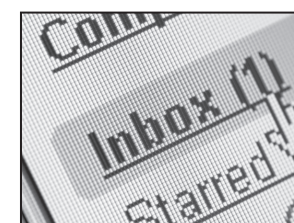
The development of computer technology in the 20th century led to a computer-based communications network known as the **internet**. During the Cold War, the United States Defense Department developed the idea of a non-centralized network of computers that could transmit communications. Because information could be transmitted along any path in the system, the destruction of one part of the system by war tactics would not disrupt communications among all other parts of the system. However, the use of the internet quickly expanded beyond defense. By the 1980s, many institutions used the internet for communications of all kinds, such as the sharing of scientific data and cataloging information from the Library of Congress. Up to this point, information on the internet could only be shared in text form. However, the invention of the **World Wide Web** in the early 1990s, allowed all kinds of digital information, including images and sound, to be transmitted over the internet.



What is the internet?

The Internet Era

In 1993, the developers of the World Wide Web announced that the web technology would be freely available to everyone without charge. Inventions of web browsers and the computer mouse allowed people to view web pages and follow hyperlinks to other pages. Because web technology was freely available, computer programmers from all around the world added applications and software to the internet. Each year saw a huge growth in every aspect of the internet, from the number of users to the number of web pages available. The use of the internet expanded from the exchange of information among scholarly and governmental institutions to private communications and commercial transactions of all kinds. By 1998, over 750,000 commercial sites existed on the World Wide Web. The 2000s saw the development of social networking sites, which have become a popular way for friends and family to keep in touch across great distances in a globalized world. During the same period, cell phone technology merged with the internet to further increase access to the World Wide Web. Many people now rely on the World Wide Web for most forms of communication, including entertainment, news, business, and personal relationships.



The internet era



The World Wide Web

1. Fill in each blank with the correct word, date, or phrase from the reading.

- a) The development of computer technology in the 20th century led to a computer-based communications network known as the _____.
- b) During the _____, the United States Defense Department developed the idea of a non-centralized network of computers that could transmit _____.
- c) By the _____, many institutions used the internet for communications of all kinds.
- d) The invention of the _____ in the early 1990s allowed all kinds of digital information, including images and sound, to be transmitted over the internet.
- e) Inventions of web browsers and the computer mouse allowed people to view web pages and follow _____ to other pages.

2. Put a check mark (✓) next to the answer that is most correct.

- a) In what year did the developers of the World Wide Web announce that the web technology would be freely available to everyone without charge?

- ☐ A 1980
☐ B 1993
☐ C 1998
☐ D 2000

- b) About how many commercial sites existed on the World Wide Web in 1998?

- ☐ A fewer than 10,000
☐ B fewer than 500,000
☐ C over 750,000
☐ D over one million

The World Wide Web

3. a) Describe the original purpose of the internet when it was first being developed.

- b) Explain how the current use of the internet is different from its original purpose.

Research

Make a Poster

4. Find out more about how the use of the internet has changed the way people communicate around the world. Use the internet or library resources to find out about:

- how many people have access to the internet around the world;
- how many World Wide Web sites exist, and where they originate from by country;
- common social uses of the internet;
- how workers from different industries use the internet;
- how people are affected when networks go down;
- how the internet is used for common transactions in everyday life, such as banking and shopping;
- how students use the internet to support learning.

Use this information to create a poster showcasing the main ideas about how people use the internet for work, education, transactions, and socializing. Display the posters in your classroom and discuss with your classmates what life would be like without the internet.

Activity Four

Communications Technology Fair

In this activity, you and your classmates will learn about many different modern communications technologies that help people around the world stay connected and exchange information for business, research, and educational purposes.

First, use the internet or library resources to research a list of 10–20 different communications technologies that people use for any of the following uses:

- staying in touch with family and friends
- keeping up with news and world events
- work and business
- education

Second, have each student in your class choose a technology from the list to learn more about. Students may work alone or in teams.

Once you have chosen your product, research answers to the following questions:

- How does the technology work?
- What devices do people use to access the technology?
- What other technologies support the use of this technology?
- How does the technology help people?
- How does the technology affect globalization?

Make a poster presentation that answers all of the questions above and contains photographs of the technology and/or its applications.

Third, set up a Communications Technology Fair in your classroom or common school area, such as the auditorium. Display the posters and products on tables, and have students stand near their displays to answer questions. Invite students, teachers, parents, and other members of your school community to walk through the Communications Technology Fair.



Crossword Puzzle!

Across

- technology helps people exchange information
- a nation that is undergoing industrialization
- able to read
- increased greenhouse gas concentration leads to global
- fabrics, such as cotton and wool
- harmful substances that people put into the environment

Down

- the movement of people, ideas, and goods around the world
- a 19th century invention using codes to send messages along wires
- related to the use of manufacturing and machines
- technology for air travel
- a giant, international network of computers
- movement of people and goods from place to place
- petroleum gas is a fossil
- greenhouse _____ trap heat in the atmosphere
- a source of energy that can be used again and again or does not run out

Word List

aviation
communications
developing
fuel
gases
globalization
industrial
internet
literate
pollution
renewable
telegraph
textiles
transportation
warming



Comprehension Quiz

22

Part A

Circle **TRUE** if the statement is TRUE or **FALSE** if it is FALSE.

- In the first millennium B.C.E., humans were trading goods and technologies over long trade routes with the aid of domesticated animals.
TRUE **FALSE**
- The period from 1900–1950 in the United States is known as the Industrial Revolution.
TRUE **FALSE**
- The telegraph was invented in the early 18th century.
TRUE **FALSE**
- The World Wide Web was developed in the latter part of the 20th century.
TRUE **FALSE**
- Natural gas is a renewable energy resource.
TRUE **FALSE**
- By the late 1950s, jet aircraft outpaced steam ships for use in international travel.
TRUE **FALSE**
- Telephones depend on the use of electromagnetic technology.
TRUE **FALSE**
- Cargo airplanes are the most efficient way to transport goods from the places where they are made to the places where they are sold.
TRUE **FALSE**

Part B

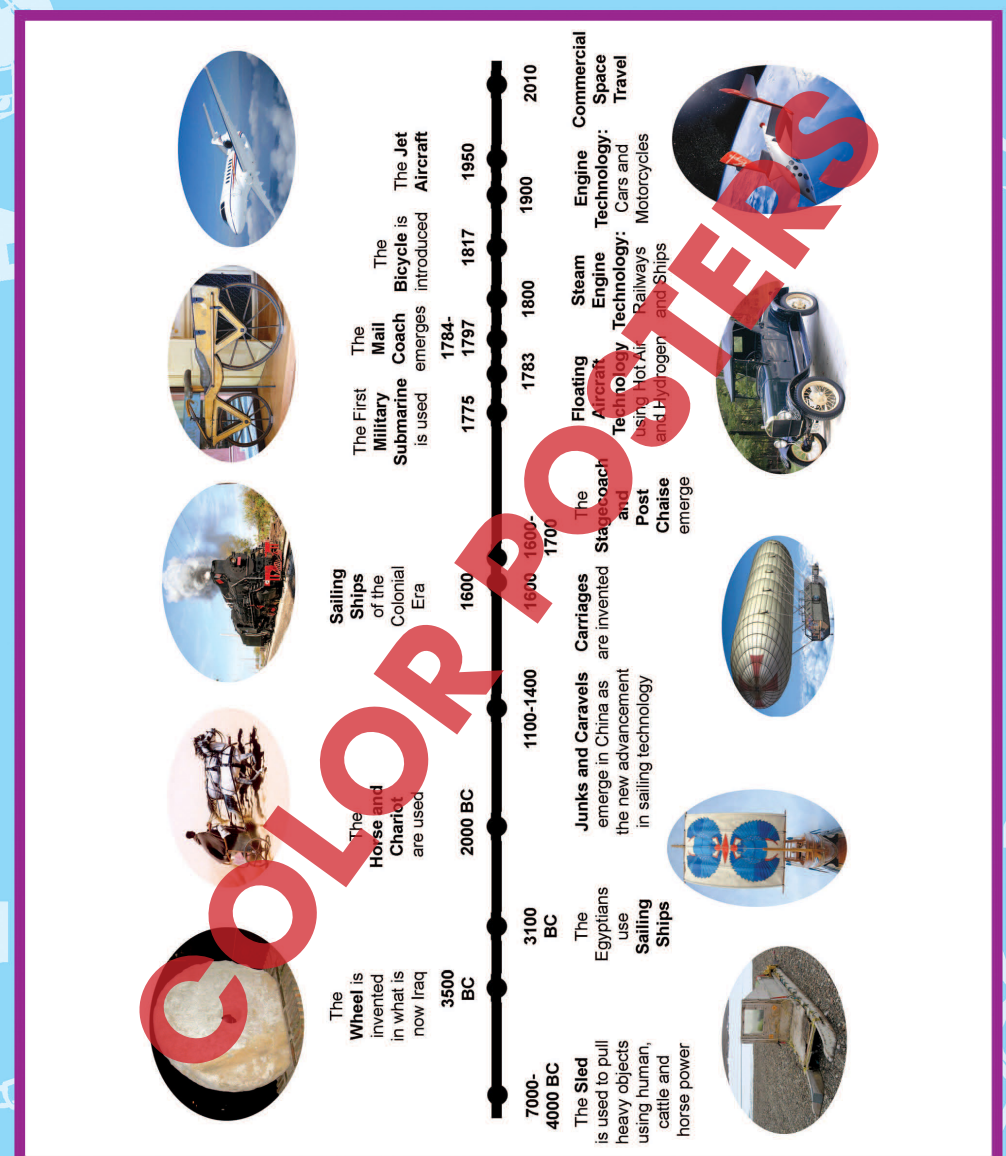
On the spaces provided, give an example of a technological development in each field and explain how that development affects globalization.

Transportation _____

Communications _____

Space _____

Travel Technology Timeline





After You Read

NAME: _____

Technology and Globalization: An Overview

3. a) Explain why advances in transportation and communication technologies are important factors in globalization.

- b) Describe one kind of technology that supports communication and/or transportation and explain its role.

Research

Write a Story

4. How does globalization depend on technology? Using the internet or library resources, find out more about how advances in communications, transportation, industry, energy use, and space technologies work together to support today's globalized world. Find out about:

- methods of international travel;
- the technologies that enable instant communication over great distances;
- how people get news and information;
- energy sources for powering technologies.

Using this information as background, write a story about a typical day in the life of an international business traveler. Be sure to describe how the main character travels; the technologies the main character uses on a daily basis; and how the main character communicates with work, friends, and family. Share your stories with your classmates.

3.

- a) Technologies help people, goods, and ideas move faster around the world.

- b) Answers will vary.

1.

Industrial is the making of products using machines, often in a factory.

2.

- a) Answers will vary.

1.

- a) coal
- b) manufacturing
- c) steam trains
- d) Industrial Revolution
- e) steel
- f) agriculture
- g) steam engines

2.

Developed nations have already gone through industrialization, developing nations are in the process of industrialization, and underdeveloped nations are still largely undomesticated and rural.

- b) Answers will vary.

3.

- a) Answers will vary but may include, people used machines to do tasks that were once done by hand; people worked in factories instead of farms.

- b) Burning coal or other fossil fuels to power factories; mining coal.

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EASY MARKING ANSWER KEY