Critical Thinking Skills

Technology & Globalization

Skills for Critical Thinking	Reading								Hands-on Activities
	Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	
LEVEL 1 Remembering									
• List Details/Facts	✓	✓	✓	✓	✓	✓	✓	✓	
• Recall Information	✓	✓	✓	✓	✓	✓	✓	✓	
• Match Vocabulary to Definitions	✓	✓	✓	✓	✓	✓	✓	✓	
• Define Vocabulary	✓	✓	✓	✓	✓	✓	✓	✓	
• Sequence		✓	✓	✓	✓		✓	✓	✓
LEVEL 2 Understanding									
• Demonstrate Understanding	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Describe	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Classify	✓	✓			✓		✓		✓
LEVEL 3 Applying									
• Application to Own Life	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Organize and Classify Facts	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Infer Outcomes		✓	✓	✓	✓	✓	✓	✓	✓
• Utilize Alternative Research Tools	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 4 Analysing									
• Distinguish Meanings	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Make Inferences	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Draw Conclusions	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Identify Cause and Effect	✓	✓	✓		✓	✓	✓		✓
• Identify Supporting Evidence	✓	✓			✓		✓		✓
LEVEL 5 Evaluating									
• State and Defend an Opinion	✓	✓			✓		✓		✓
• Make Recommendations		✓			✓	✓		✓	✓
• Influence Community		✓	✓	✓	✓	✓		✓	✓
LEVEL 6 Creating									
• Compile Research Information	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Design and Application						✓	✓		✓
• Create and Construct	✓	✓	✓	✓		✓	✓	✓	✓
• Imagine Alternatives	✓	✓	✓	✓		✓		✓	✓

Based on Bloom's Taxonomy

Communications Technology

1. **a)** Use a dictionary to look up the word COMMUNICATION. Write the definition on the spaces provided.

The definition of **communication** is:

_____

_____

b) Based on the definition above, what do you think communication technologies are? Write your ideas on the spaces provided.

_____

_____

c) On the spaces provided, list three technologies that you use to communicate.

_____

_____

_____

2. **Write each word beside its meaning. You may use a dictionary to help you.**

| papyrus | codes | electromagnetic radiation | hieroglyphics |

☐ **a)** pictures used to represent words in a language

☐ **b)** a lightweight writing material used in Ancient Egypt

☐ **c)** systems used to represent words for communicating messages

☐ **d)** a form of energy that travels in waves

Energy Technology

Electricity

Technological advances in electromagnetic technology during the 19th century led to the development of electricity as a power source for homes and businesses. The technology to generate electricity and transmit it along power lines developed, and inventions such as the electric light bulb quickly replaced older technology, such as gas lamps. Many power plants that generated electricity were run by hydroelectric power, such as large plants at Niagara Falls and the Hoover Dam. Others burned fossil fuels such as coal to produce steam for the generators. By the middle of the 20th century, most homes in the United States received electricity.
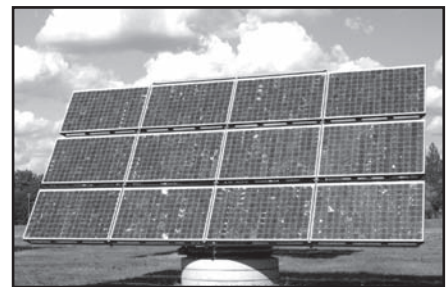
The use of electricity revolutionized people's lifestyles. It allowed for the development of machines to help with everyday tasks, such as vacuum cleaners and washing machines, giving people extra time for other activities. Electricity was also an essential development for communications technologies, such as telephones, radio, television, computers, and the internet.

STOP

When did the technology for electricity develop?

_____

_____

Alternative Energy

The burning of fossil fuels produces disease-causing **pollution**, harmful substances added to the environment. It has also added excess greenhouse gases, such as carbon dioxide, to the atmosphere. **Greenhouse** gases trap heat and the rise in greenhouse gas concentration has led to a rise in Earth's average temperature, or **global warming**. Fossil fuels have other problems, too, such as a limited supply. In recent years, many governments have recognized these problems and passed legislation encouraging the transition to **alternative**

Photovoltaic or solar panel

energy sources, such as solar, wind, hydroelectric, tidal, and geothermal energy. These energy sources have the advantage of producing less pollution. Their supply is not limited like fossil fuels. The development of alternative energy technology can help developed and underdeveloped nations alike. As alternative energy technologies, such as solar panels, become cheaper and more widely available, they can be used to deliver electricity to underdeveloped nations. It is hoped that this will allow nations to develop without having to proceed through the often dirty and destructive process of industrial revolution.

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After You Read

Space Technology

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

a) In 1957, the Soviet Union launched the first human-made _____.

b) In _____, the Soviet Union put the first human into orbit.

c) The United States landed the first astronaut on the moon in _____.

d) The _____ is an orbiting science laboratory that allows astronauts to stay for months at a time conducting space research.

e) The development of _____ technology allowed Earth to be studied as a whole planetary entity.

f) _____ satellites send information about the location of vehicles, such as jets, ships, and even cars, which helps pilots and drivers navigate.

g) Communications satellites are in _____ orbit, which means they always stay above the same location on Earth.

2. Before you read, you wrote about uses of satellite technology that you had heard about. What satellite technologies did you already know about before reading the passage? What new ones did you learn about? Write a list of satellite technologies on the spaces provided. Draw a star next to the ones you learned about during the reading.

_____   _____

_____   _____

_____   _____

_____   _____