

CGC1P Unit 4: Canadian Industries

Activity 9: Tertiary Industry: Technology

Overview

The final segment of tertiary technology is called quaternary industry. This is the decision-making and technology sector of our economy. In this activity, the student will examine the variety of technologies that impact upon Canadian and global lifestyles.

Lesson

The final segment of tertiary technology is called **quaternary industry**. This is the decision-making and technology sector of our economy. Stockbrokers, financial analysts, and computer experts are examples of persons who work in this type of industry in Canada.

Canada, throughout its history, has always been at the forefront of technological change, especially when it comes to communications technology. From the experiments of Guglielmo Marconi and Alexander Graham Bell to Ted Rogers and satellite communications, Canada has been a world leader.

Main Areas of the High Tech Sector in Canada

- **Information technology:** this sector deals with storing, retrieving, and sending information and telecommunications
- **Aerospace technology:** technology for the aircraft and space industries
- **Biotechnology:** involves using plants and animals to develop new products (e.g., some companies can produce new crops that are resistant to pesticides by genetically altering the plant)
- **Ocean research technology:** involves analyzing ocean currents and fish populations to measure important changes in our oceans.

Important Definitions

- **Quaternary:** this sector of the economy deals with decision-making and high tech businesses.
- **Stockbrokers:** stockbrokers buy and sell shares in publicly traded companies. Most of their work is done using computer technology.
- **Financial analysts:** financial analysts plan and invest money for their clients to ensure their security in the future.
- **Guglielmo Marconi:** inventor of the wireless telegraph. The first cross-Atlantic signal was received on Signal Hill, Newfoundland.

- **Alexander Graham Bell:** inventor of the telephone.
- **Ted Rogers:** in 1925, he developed the first radio that could use normal household electrical current instead of cumbersome batteries. He also founded CFRB radio, which is still operating today.

Assignment

1. Why do you think Canadians have been such innovators? What is it about our Canada's geography that forces us develop better communications technology?
2. Canada has been involved in satellite technology for many years. Do some research and answer the following questions:
 - a. What was the name of Canada's first domestic satellite that was launched in 1973?
 - b. What does the name mean? What language is it?
 - c. Why do you think this name was chosen for the satellite?
 - d. How do you think satellite technology has brought Canadians closer together?
3. GPS stands for Global Positioning System. Do some research to discover how GPS works and to answer the following questions:
 - a. How many GPS satellites are orbiting earth?
 - b. Who developed and operates GPS satellite technology?
 - c. How does GPS determine your position on earth?
 - d. When was the first GPS satellite launched?
 - e. Think of 5 uses for GPS technology for the average citizen