

Oil and Gas in Canada

Name: _____

Content: Resources and economic development in different regions of Canada

Curricular Competency: Use Social Studies inquiry processes and skills to — ask questions, gather, interpret, and analyze ideas, and communicate findings and decisions

Curricular Competency: Develop a plan of action to address a selected problem or issue

Curricular Competency: Construct arguments defending the significance of individuals/groups, places, events, or developments (significance)

Curricular Competency: Ask questions, corroborate inferences, and draw conclusions about the content and origins of a variety of sources, including mass media (evidence)

Curricular Competency: Sequence objects, images, or events, and recognize the positive and negative aspects of continuities and changes in the past and present (continuity and change)

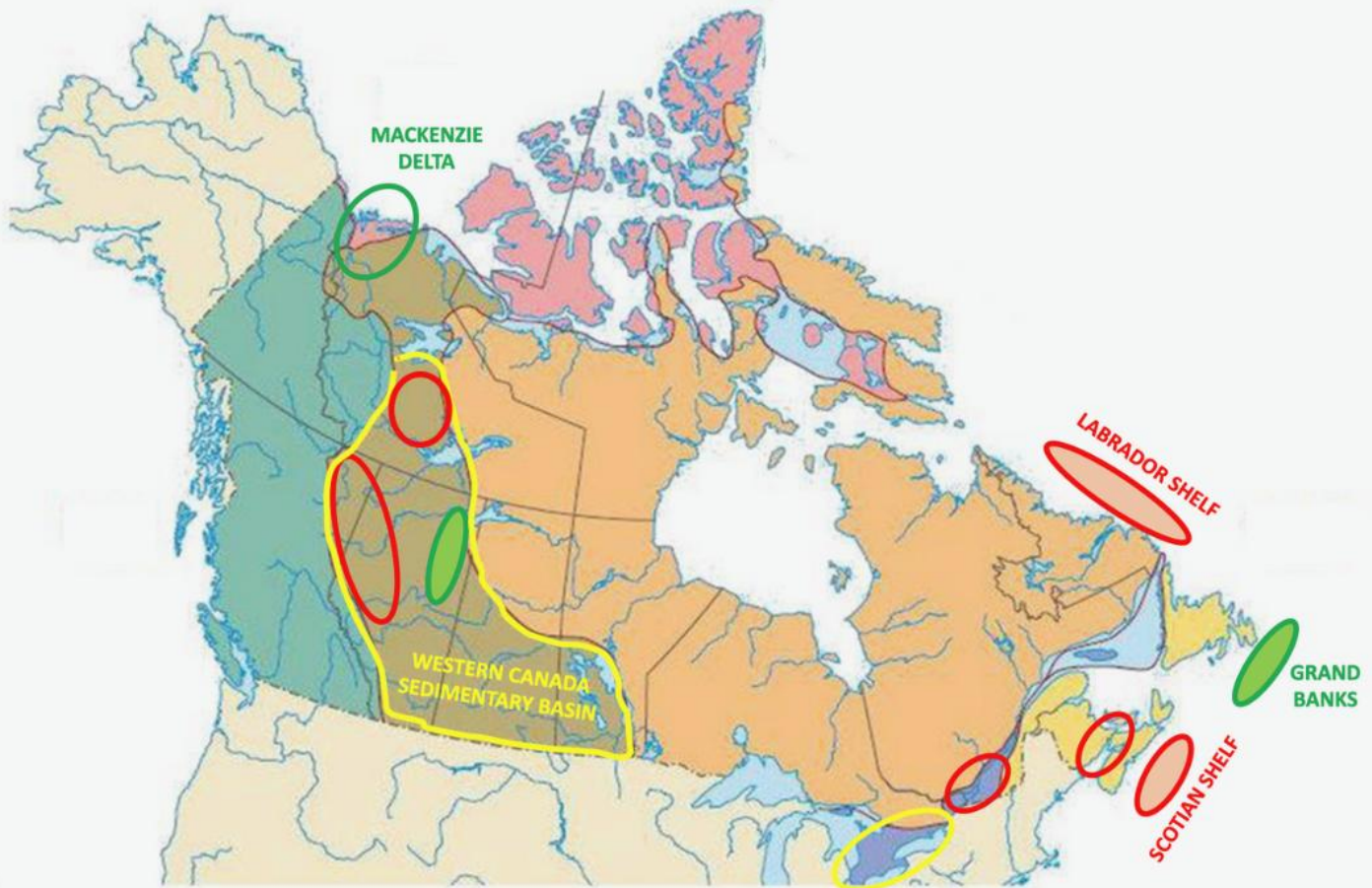
Curricular Competency: Differentiate between short- and long-term causes, and intended and unintended consequences, of events, decisions, or developments (cause and consequence)

Curricular Competency: Take stakeholders' perspectives on issues, developments, or events by making inferences about their beliefs, values, and motivations (perspective)

Curricular Competency: Make ethical judgments about events, decisions, or actions that consider the conditions of a particular time and place, and assess appropriate ways to respond (ethical judgment)

First Peoples Principles of Learning: Learning is reflective

Figure 2. Major Oil and Gas Areas of Canada



Canada produces oil and gas from Western Canada, East Coast offshore and southern Ontario. Enormous untapped or under-developed potential exists across the nation.

The Oil and Gas Industry in Canada

The oil and gas industry is one of Canada's most important natural resources. Oil (also called petroleum) and natural gas are **fossil fuels** – energy sources formed from the remains of plants and animals millions of years ago. Oil and gas are used to produce **fuel for cars, airplanes, and ships**, heat for homes, electricity, and products like plastics, medicines, and chemicals. Oil and gas are taken from underground using **drilling**. Companies drill deep wells into rock formations where oil or gas has formed over millions of years. Sometimes, special methods like **steam injection** are used to help get thick oil from the oil sands. Once extracted, the oil and gas are transported through **pipelines, trucks, or ships** to refineries, where they are turned into products like gasoline, diesel, natural gas, and plastics.

Where It's Found:

Most of Canada's oil and gas comes from **Alberta**, especially the oil sands near Fort McMurray. Other areas include Saskatchewan, British Columbia, and offshore oil fields in the Atlantic, like in Newfoundland and Labrador. Natural gas is also found in Alberta, BC, and the northern territories.

History and Development:

Canada has been producing oil since the 1800s, but the industry grew rapidly in the 20th century. In the 1940s and 1950s, new technologies made it easier to drill deep into the ground and extract oil and gas. The development of pipelines allowed these resources to be transported to cities and ports for people to use and for export.

Economic Importance:

- The oil and gas industry contributes **tens of billions of dollars** to Canada's economy each year.
- It provides **hundreds of thousands of jobs** in extraction, transportation, refining, and sales.
- Canada is one of the **world's largest oil producers** and exports oil and gas to countries like the United States, bringing in more revenue.
- It also helps support related industries, such as petrochemicals, manufacturing, and construction.

Environmental Considerations:

Oil and gas are **non-renewable resources**, which means they cannot be replaced quickly. Extracting and using fossil fuels can cause **pollution, oil spills, and greenhouse gas emissions**, which contribute to climate change. The oil sands, in particular, require a lot of water and energy to extract, and their development has affected the land and wildlife. Because of this, Canada works on **environmental regulations and cleaner technologies** to reduce the impact of the industry.

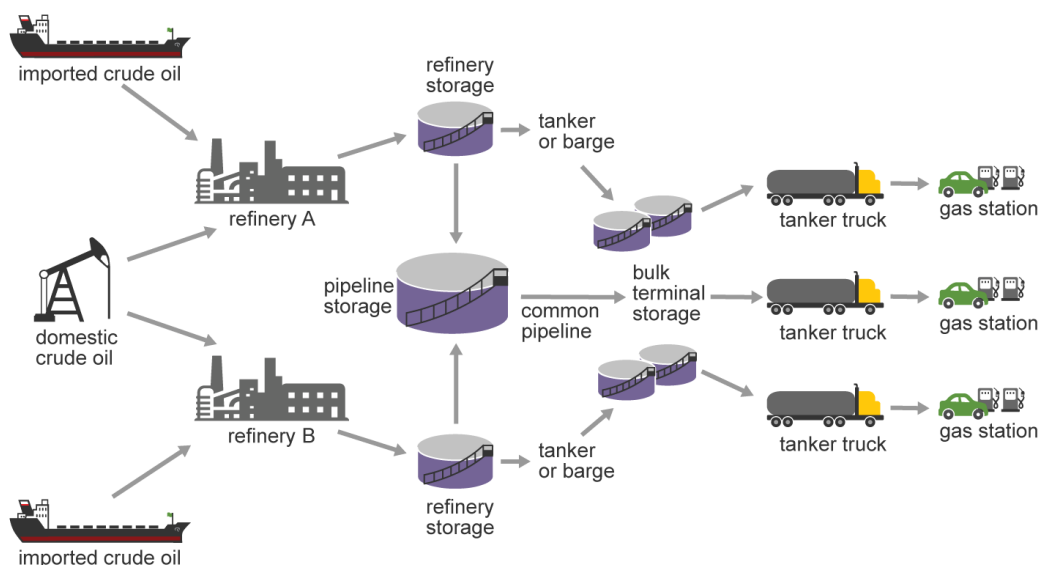
Connection to Canadians' Lives:

Oil and gas affect everyday life. Gasoline powers cars and buses, natural gas heats homes, and many products, like plastics, electronics, and fertilizers, are made from oil. The industry also supports towns and communities in Alberta, Saskatchewan, and other regions, making it a key part of both the economy and daily life.

Balancing Benefits and Challenges:

Canada must balance the economic benefits of oil and gas with the need to protect the environment and respect Indigenous lands. Some Indigenous communities are directly involved in oil and gas projects, sometimes benefiting from jobs and revenue, while others oppose projects that threaten traditional lands and water. This shows how important it is to **manage natural resources responsibly**.

Flow of crude oil and gasoline to your local gas station



Curricular Competency: Use Social Studies inquiry processes and skills to – **ask questions**, gather, interpret, and analyze ideas; and communicate findings and decisions

Write down 5 questions that you are wondering about the oil and gas industry in Canada:

1. _____
2. _____
3. _____
4. _____
5. _____

Curricular Competency: Take stakeholders' perspectives on issues, developments, or events by making inferences about their beliefs, values, and motivations (perspective)

What do you think the following people might believe about **oil and gas**? (large-scale oil and gas operations, to then sell the product)

An oil refinery owner in Alberta	An environmentalist / conservationist in Alberta
Why might they support/oppose commercial oil and gas? _____ _____ _____ _____ _____ _____	Why might they support/oppose commercial oil and gas? _____ _____ _____ _____ _____ _____
What might make them want to encourage / discourage MORE oil and gas operations than there already are? _____ _____ _____ _____ _____ _____	What might make them want to encourage / discourage MORE oil and gas operations than there already are? _____ _____ _____ _____ _____ _____

Curricular Competency: Construct arguments defending the **significance** of individuals/groups, places, events, or developments (significance)

Someone tells you that "oil and gas aren't that big of a deal in Canada." What are your thoughts? Would you agree with them? Disagree with them? Are oil and gas actually that significant of a thing in the Canadian economy, and in Canadian society? Explain your thinking.

Curricular Competency: Differentiate between short- and long-term causes, and intended and unintended consequences, of events, decisions, or developments (cause and consequence)

Curricular Competency: Make ethical judgments about events, decisions, or actions that consider the conditions of a particular time and place, and assess appropriate ways to respond (ethical judgment)

Oil and Gas in Canada: Causes and Consequences

Short-Term Causes (things that made oil and gas development grow quickly):

- High demand for fuel for cars, airplanes, and electricity.
- Discovery of large oil and gas reserves, especially in Alberta's oil sands.
- Development of pipelines and drilling technology that made extraction faster and cheaper.

Long-Term Causes (things that built up over time):

- Fossil fuels have formed over millions of years under Canada's land.
- Canada's economy and industry have relied on oil and gas for energy and manufacturing for decades.
- Global trade and population growth increased the demand for oil and gas around the world.

Intended Consequences (what people wanted):

- Jobs and income for workers in extraction, transportation, and refining.
- Fuel for Canadians and other countries.
- Money from exports to strengthen the Canadian economy.

Unintended Consequences (what happened by accident):

- Environmental damage, including greenhouse gas emissions and climate change.
- Oil spills and pollution affecting land, rivers, and wildlife.
- Conflicts with Indigenous communities if projects affect traditional lands or water sources.
- Economic dependence on a non-renewable resource, which could cause challenges if oil prices fall or reserves run out.

Which of these short-term or long-term causes impacted oil and gas operations the most? Why is that?

Which of these consequences is the most disastrous? Why is that?

Curricular Competency: Develop a plan of action to address a selected problem or issue

If you were in charge of oil and gas operations in Canada, what would you do? What would be your course of action, in regards to oil and gas operations in the future? Why is that?
