



Plants for Food and Fibre

Lesson 1



Learning Objectives

Students will:

- *illustrate and explain the essential role of plants within the environment*
- *“...describe human uses of plants as sources of food and raw materials, and give examples of other uses (e.g., identify uses of plants as herbs or medicines; describe plant products, and identify plant sources on which they depend).”*

From Alberta Programs of Study, 2014, p. 15



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01. Thinking about plants

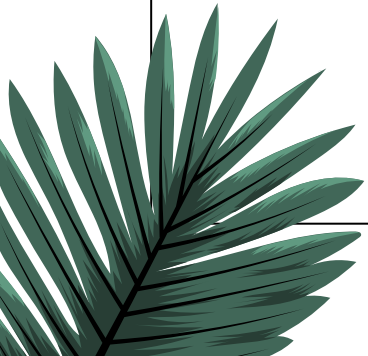
What do they
mean to you?

02. Learning

Plants, their uses,
views

03. Activity

Indigenous plants



**“In some Native
languages the term for
plants translates to
“those who take care of
us.”**

-Robin Wall Kimmerer,
Braiding Sweetgrass



The image features a white background with a thin black rectangular border. In the corners, there are stylized green illustrations of various plants, including large broad leaves and fern fronds. The text '01.' is positioned at the top left, followed by a horizontal line that spans across the top of the page.

01.

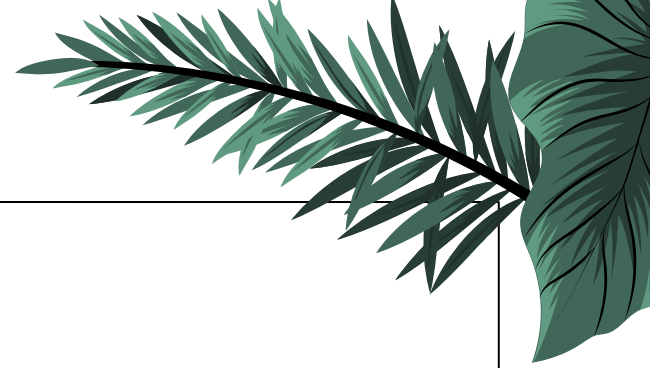
**Thinking
about
plants**

On the Sticky Note:

Answer:

What do plants mean to you?

When you are done, stick it on the
whiteboard





02.

Learning





**How Do Humans Use
Plants?**

Food

- We can eat plants and food made from them
- What are some edible plants?

Fibre

- Tissue of plants
- Used to make a wide range of products
- What are some examples of plant fibres?



Other Uses

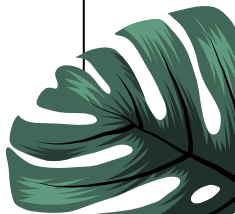
- Produce oxygen
- Use carbon dioxide and remove it from the atmosphere
- Help clean and filter water
- Provide shelter
- Keep Soil in Place
- Used as medicine
- Transportation and construction
- Fuel

A decorative border of various green tropical leaves, including palm fronds and broad-leafed plants, framing the central text. The leaves are rendered in shades of green with black outlines and are arranged in a circular pattern around the text.

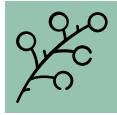
Specific Uses of Plants

Plants for Fibre

- The fibre of plants is used to make clothing, paper and shelter
- Cotton, hemp and flax are all natural fibres that we use



Plants for Fibre



Cotton

- Absorbs moisture and allows it to evaporate easily
- Fibres come from the plant's seeds
- Fibres are strong and flexible
- Easily made into thread
- Used to make cotton batting, rayon, and some plastics and paper



Hemp

- Oldest cultivated fibre in the plant world
- Used to make paper and rope in the past
- Has less of a negative effect on the environment than other fibres
- Plant grows quickly



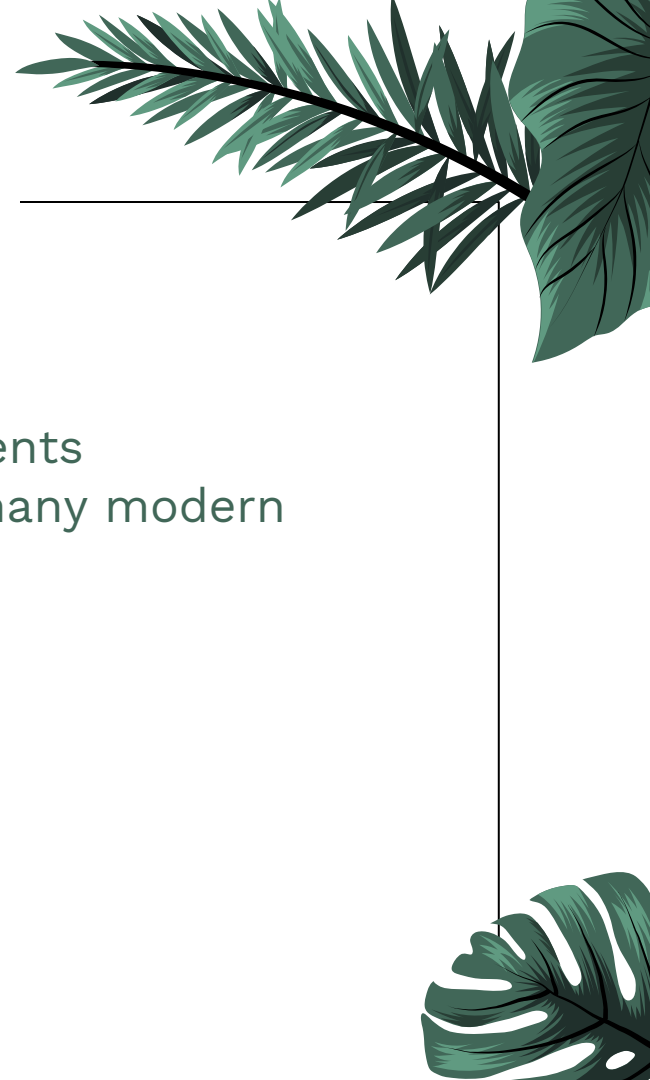
Flax

- A food and fibre crop
- 2-3X as strong as cotton
- Was used for cloth in the past
- Grown in Canadian prairies for linseed oil



Plants for Medicine

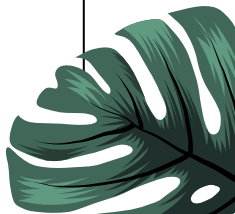
- Plants were the first medicine
- Used by Indigenous Peoples for centuries
- Many modern medicines use plant ingredients
- Some plants are also the “blueprint” for many modern medicines.





Plants for Transport

- Did you know that natural rubber comes from plants?
- How else might plants be used for transport?

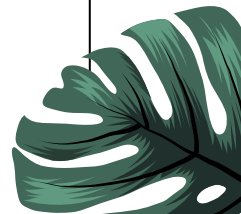




Indigenous Peoples used plants to make the first boats

Plants for Fuel

- Plants may serve as an alternative to petroleum and oil
- You can burn wood to keep you warm
- The sugar in some plants can be turned into liquid fuel
- Fuel from plants is economical, but not very energy efficient
 - A lot of energy is needed to grow and harvest plants
 - A lot of energy is lost when they are converted to fuel





03.

Activity

Indigenous Plants



- **Get into groups of 2-3 people**
- **Match the picture of the plant that are important to Indigenous Peoples with their correct description**

References

General:

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