## Science 7 Unit D: Plants for Food & Fibre

# **Topic 1**

# **People and Plants**

pp. 92-103



## WORKBOOK

Name: \_\_\_\_

→ Read pp. 92-93

#### Plants in the Environment

- plants are a critical part of ecosystems
- use  $CO_{2(g)}$  to produce  $O_{2(g)}$
- producers are the basis of most food webs
- provide shelter for many animals
- roots prevent erosion by
  - help hold soil in place
- clean and filter water when they absorb it
  - helps regulate the flow and storage of water

→ Read "Did You Know" - p. 92

#### **Plants for Food**

- 75% of the world's food supply is based on seven major crops
  - o wheat, rice, maize (corn), potatoes, barley, cassava, and sorghum

 $\rightarrow$  Discuss Figure 2.1 - p. 92

→ Read "Did You Know" - p. 94

#### → Read pp. 94-95

- → plant tissue from the stem, leaves, seeds, or roots
  o used for clothing, paper, and shelter
- → Read "Did You Know" p. 95

#### What Do We Eat?

#### Information about the world's seven major food crops.

North Americans are very familiar with the following five of the seven major food crops.

- **Rice:** Rice is a grain produced in many countries. It is grown in wet areas and is a staple in the diets of many people around the world.
- **Potatoes:** Potatoes are a common food source in many temperate climate countries. The potato itself is a tuber (swollen underground stem).
- **Wheat:** Wheat is common grain in North America and in some other countries around the world. Wheat is used to produce high-quality flour for baked goods and pastas. Some of the best quality wheat in the world is grown in western Canada.
- **Corn:** Corn is a common grain in many parts of the world. It is less common in Canada than other grains. Corn is grown extensively in the United States and other countries where the growing season is more suitable. Corn, as well as products from its flour, are common foods in many parts of the world. Corn is also used extensively as feed for livestock.
- **Barley:** Barley is also a common livestock feed. Barley grows well in cool areas with shorter growing seasons. This is one reason why it is so commonly grown in western Canada. Barley has also been added in breads or cooked in many dishes, such as soups and stews. Barley is also used to brew many beers worldwide and is one of the ingredients in a drink for invalids, lemon barley water.

The last two food crops are not commonly grown or found in North America.

- **Cassava:** Cassava is a native plant in Brazil. The roots of the cassava plant are used to produce starch, flour, and tapioca.
- **Sorghum:** Sorghum is a corn-like plant, likely native to Africa, and can withstand dry conditions. One variety is used to produce molasses. Other grain-like varieties are used for grain production to feed humans and/or livestock. Some grassy varieties are used for grazing and hay production. Yet another variety is used to make the bristles in "corn" brooms.

- $\rightarrow$  Read "Off the Wall" p. 98
- → Read pp. 98-99
  - many medicines contain ingredients made from plants
- → Discuss "Find Out Activity" p. 99
  - Herbal Remedies

 $\rightarrow$  Read p. 100

#### Plants for Transportation and Construction - structures

- rubber is one of the most important plant products that people use
- plants are also used to make boats and other modes of transportation
- certain plants are the source of mechanical lubricants
  - used to oil machinery parts to keep them working properly
    - reduce friction and prevent rust (protect layer)
- plants are also used for construction all around the world
  90% of houses in North America are made from wood
- → Read "Did You Know" p. 100
- → Read "Did You Know" p. 101

#### $\rightarrow$ Read p. 101

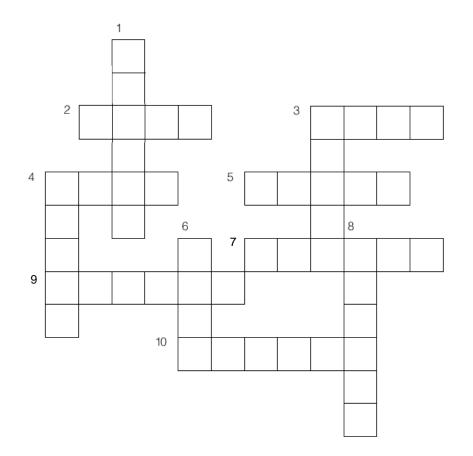
#### Plants for Fuel

- plant products such as wood and fossil fuels are used for fuel
  - o burn to heat homes, generate electricity, operate engines, etc.
    - combustion reaction
- can create liquid fuels, ethanol and methanol, from the sugar in some plants

#### Plant Words Vocabulary Check

#### What to Do

Complete the following crossword puzzle using the clues provided.



#### Across

- 2. Crop grown in northern, cooler regions
- **3.** Houses are made from this.
- **4.** We grow plants for \_\_\_\_\_ and fibre.
- 5. Plants grow from \_\_\_\_\_.
- 7. A natural fibre used in space suits
- 9. A plant used in cars
- **10.** We get food and fibre from \_\_\_\_\_.

#### Down

- 1. Aspirin comes from the bark of this tree.
- **3.** A crop used for making bread
- 4. Plant tissue from the stem, leaves, seeds, or roots.
- 6. The first jeans were made from this cloth.
- 8. Fibre is the \_\_\_\_\_ of plants.

### Complete Topic 1 Review Questions – p. 103 #1-8

Please record your answers below or on an attached sheet of loose leaf.