



## KNOW YOUR FOOD TRAILER

### Junior/Senior High Connections

#### SCIENCE

Developing a Social and Environmental Emphasis (Grades 7-9)

Science and technology have contributed to human well-being and have influenced, and been influenced by, social development. Canadian society supports scientific research and technological development that helps achieve a sustainable society, economy and environment.

#### Grade 7

##### Unit B: Plants for Food and Fibre (Science and Technology Emphasis)

Overview: Humans have always depended on plants as a source of food and fibre, and to meet a variety of other needs. To better meet these needs, technologies have been developed for selecting and breeding productive plant varieties and for maximizing their growth by modifying growing environments. Long-term sustainability requires an awareness of the practices humans use and an examination of the impacts of these practices on the larger environment.

Outcomes:

- Investigate plant uses; and identify links among needs, technologies, products and impact.
- Investigate life processes and structures of plants, and interpret related characteristics and needs of plants in a local environment.
- Analyze plant environments, and identify impacts of specific factors and controls.
- Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre.

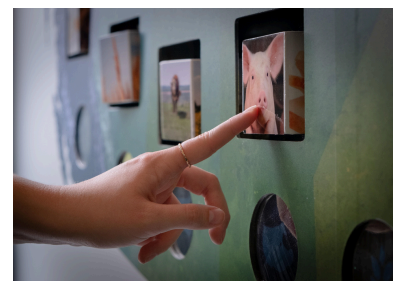
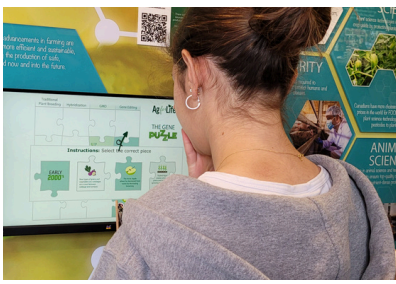
#### Grade 9

##### Unit C: Environmental Chemistry

- Overview: Environments are often viewed from a physical and biological perspective, but to fully understand how they function, it is important to view them from a chemical perspective as well. A study of environmental chemistry helps students understand that chemical substances make up the underlying fabric of the world and are part of the process in all natural cycles and changes. Through this unit, students also become aware of human-produced chemical substances that enter and interact with environments, and they investigate potential impacts of different substances on the distribution and abundance of living things.

Outcomes:

- Investigate and describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things.
- Identify processes for measuring the quantity of different substances in the environment and for monitoring air and water quality.
- Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment.



## FOD1070: FARM TO TABLE

Students explore the basic steps involved in planting, growing and harvesting a plant commodity or in raising, growing and finishing an animal commodity in Alberta, and identify how the finished product is incorporated into a recipe.

## SOCIAL STUDIES

### Grades 7,8 & 9

**The Land:** Places and People Exploring the unique and dynamic relationship that humans have with the land, places and environments affects decisions that students make and their understanding of perspectives, issues, citizenship and identity. Students will examine the impact of physical geography on the social, political, environmental and economic organization of societies. This examination also affects students' understanding of perspectives and issues as they consider how connections to the land influence their sense of place.

**Economics and Resources:** Exploring multiple perspectives on the use, distribution and management of resources and wealth contributes to students' understanding of the effects that economics and resources have on the quality of life around the world. Students will explore basic economic systems, trade and the effects of economic interdependence on individuals, communities, nations and the natural environment. Students will also critically consider the social and environmental implications of resource use and technological change.

**Global Connections:** Critically examining multiple perspectives and connections among local, national and global issues develops students' understanding of citizenship and identity and the interdependent or conflicting nature of individuals, communities, societies and nations. Exploring this interdependence broadens students' global consciousness and empathy with world conditions. Students will also acquire a better comprehension of tensions pertaining to economic relationships, sustainability and universal human rights.

## Elementary Connections

### SCIENCE

Demonstrate positive attitudes for the study of science and for the application of science in responsible ways.

**Earth Systems:** Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.

**Gr. 4** – Earth’s systems are interconnected and can be impacted by small changes.

**Gr. 5** – Climate and weather events influence agricultural practices.

**Gr. 6** – Climate change can impact agricultural practices, such as, crop selection, crop production, harvesting periods and yields, irrigation, pest management.

**Living Systems:** Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.

**Gr. 4** – Organisms are living things that respond to stimuli and include plants, humans, and other animals.

**Gr. 5** – Plants are complex organisms with transport systems that carry out specific functions for survival.

**Gr. 6** – Ecosystems are complex systems of biotic and abiotic components.

Plants carry out the process of photosynthesis, which uses light, water, and carbon dioxide to produce oxygen and food in the form of sugar (glucose).

### ALL GRADES

#### HEALTH

**W-1.5** recognize the importance of basic, healthy, nutritional choices to well-being of self; e.g., variety of food, drinking water, eating a nutritious breakfast.

**W-K.5** recognize that nutritious foods are needed for growth and to feel good/have energy; e.g., nutritious snacks.

