

Exploring Manitoba's Dairy Industry

TEACHER GUIDE (Gr 4)

Agriculture is an essential industry that we all rely on to provide us with food for our tables. Food that helps us maintain a well-balanced, healthy diet.

Agriculture in the Classroom – Manitoba invites your students to explore the world of dairy. First, students can take a virtual tour of Signer Farms, a local dairy operation in Kleefeld, Manitoba with host dairy farmer, Stefan Signer. Then students can expand their learning with curriculum linked activities.

Students will:

- Explore the production of milk on a local dairy farm
- Learn what dairy cows need to stay safe and healthy - building features, life processes and animal nutrition needs
- Create a dairy farming food chain and identify the producers, consumers, herbivores, carnivores and omnivores in the food chain
- Identify the nutrients found in milk
- Identify that milk and milk products are part of the protein group in Canada's Food Guide

Grade 4 Activities

First, watch this virtual tour of Signer Farms, a dairy farm located in Kleefeld, MB (20:38):

<https://www.youtube.com/watch?v=Nqo1OY-OhHg>

ACTIVITY 1: DAIRY FARMING FOOD CHAIN WORKSHEET

Procedure

This worksheet will:

After watching the video, Dairy farm tour with Stefan Signer, students can complete the **Dairy Farming Food Chain worksheet**.

This worksheet will allow students to review the components of the food chain including what plants are fed to the dairy cows,



the milk that is produced and why milk is a nutritious food for people. Then, students will create a dairy farming food chain and label the parts of their food chain as producers, consumers, herbivores or omnivores.

Materials Needed

- 1 copy per student of the **Dairy Farming Food Chain**
- Scissors
- Glue
- Answer Key

ACTIVITY 2: DESIGN A DAIRY COW HABITAT

Procedure

After watching the video, Dairy Farm Tour with Stefan Signer, students can complete the [Design a Dairy Cow Habitat worksheet](#).

This worksheet has students designing, using paper and pencil, a shoe box model, Lego or Minecraft, a dairy cow habitat that will meet all the needs of a dairy cow.

Then students can think about and identify the types of people and careers that would be needed by the agriculture industry to build and equip their dairy cow habitat.

Materials Needed

- 1 copy per student of the [Design a Dairy Cow Habitat Worksheet](#)

Curriculum Outcomes (Gr 4 Activities)

Science - Cluster 1		Activities		
		Signer Farm Video	#1	#2
4-1-01	Use appropriate vocabulary related to their investigations of habitats and communities. Include: habitat, physical adaptation, behavioural adaptation, traditional knowledge, technological development, population, community, food chain, food web, organism, producer, consumer, herbivore, omnivore, carnivore, predator, prey, scavenger, endangerment, extinction, conservation.		✓	✓
4-1-03	Identify the components of an animal habitat. Include: food, water, living space, cover/shelter.	✓		✓
4-1-10	Recognize that the food chain is a system in which some of the energy from the Sun is transferred eventually to animals.		✓	
4-1-11	Construct food chains and food webs and classify organisms according to their roles. Include: producer, consumer, herbivore, omnivore, carnivore, predator, prey, scavenger.	✓	✓	