Design a Dairy Cow Habitat

TEACHER GUIDE (GRADE 4).

GOALS:

- Identify all the components of a dairy cow habitat
- Design a dairy cow habitat that meets the needs of dairy cows

CURRICULUM CONNECTIONS

Grade 4 Science Cluster 1: Habitats and Communities				
4-1-02	Recognize that each plant and animal depends on a specific habitat to meet its needs.			
4-1-03	Identify the components of an animal habitat. Include: food, water, living space, cover/shelter.			
4-1-12	Use the design process to construct a model of a local or regional habitat and its associated populations of plants and animals.			

Materials Needed:

- <u>Design a Dairy Cow Habitat Worksheet</u> 1 per student or student group
 - o Plus, any or all the following design materials
 - » Paper and pencil
 - » Shoe box, paper, scissors, glue
 - » Lego
 - » Minecraft

BACKGROUND INFORMATION:

Foundations of Manitoba Agriculture:

Dairy

snapAG sheets from Agriculture in the Classroom - Canada:

Dairy Cows

RECOMMENDED COMPLEMENTARY RESOURCE:

Follow the Farmers Dairy Farm video - use either:

- Option 1 Signer Dairy Farm video (6:47)
- Option 2 YouTube recording <u>Signer Dairy Farm video with Q&A with Stefan Signer and a Kahoot</u> (1:03:43)



Lesson Plan

Activate

- Discuss and/or review with your students what a habitat is.
- Ask students to:
 - Describe what they think a habitat for dairy cows would be like.
 - o Make a list of all the things dairy cows would need in their habitat to survive and thrive.
 - Answer the question: Since dairy cows are domestic animals and not wild animals, who is responsible for providing a habitat for the cows that meets all their needs?

A **habitat** is where the animal or plant lives and is able to meet its basic needs.

Domestic animals are animals that:

- Have been selectively bred by humans over many generations
- Are genetically distinct from their wild ancestors
- Depend on humans for food, water, and shelter

Examples include: cows, pigs, sheep, chickens, dogs, cats



Acquire

 Have students work individually or in small groups to complete the Design a Dairy Cow Habitat worksheet



Assessment ideas:

- Present their design to the class or a group of students.
- Display their design and have a gallery walk to view all the designs (Optional –have students write a description of their design, the components they have included and why, as part of their display.)
- Use the following rubric for self, peer, or teacher evaluation of their habitat design.

DESIGN A DAIRY COW HABITAT WORKSHEET RUBRIC

	3 Points	2 Points	1 Point	Points
Dairy cow barn habitat	Design meets all 5 of the cows' needs for food, water, living space, shelter, and cow comfort.	Design meets only 3 or 4 of the cows' needs for food, water, living space, shelter, and cow comfort.	Design meets only 1 or 2 of the cows' needs for food, water, living space, shelter, and cow comfort.	
Presentation of design	Design components were clearly identifiable and overall design was well suited for dairy cows.	Some design components were clearly identifiable and overall design was suitable for dairy cows.	Design components were not easily identifiable and overall design was not well suited for dairy cows.	
Neatness of work	Very neat and easy to read, view and explore the design.	Somewhat neat and mostly able to read, view and explore the design.	Lacks neatness making it difficult to read, view and explore the design.	
Careers needed to build the cow barn habitat	Student circled 12 or more careers and added 1 or more to the list.	Student circled 12 or more careers.	Student circled less than 12 careers.	