

# **ALL ABOUT BEEF!**

This series of lessons provide an interdisciplinary thematic unit about beef cattle.



# **PRIMARY KIT**

Subject Levels/ Suggested Grades:
Science K-3 | English Language Arts K-3 | Social Studies K-3 | Careers K-3

Written by: Amy Stafford, Sabrina Bhojani

Design by: Two Bears Creative

All rights reserved. No part of this resource covered by the copyrights herein may be reproduced or used in any form or by any means - graphic, electronic or mechanical - without written permission from the BC Agriculture in the Classroom Foundation. A limited copyright is granted for the teacher who may photocopy the information contained within this resource for his/her own classroom use. These pages may be reproduced for their intended use only.

© Copyright 2021 BC Agriculture in the Classroom Foundation

Cover Photo Credit: Kari Lynn Hoffman, Kamloops





## **TEACHER BACKGROUND**

The beef industry is important to British Columbia's economy and supports many family and community businesses. It is extremely diverse, including small hobby farms, diversified operations, cattle feeders, feedlots, and large cattle ranches. The BC ranching industry is continually finding new and innovative methods to manage the industry in an environmentally sustainable way. This series of lesson plans make the 'farm to fork' connection, supporting an understanding of the beef cattle ranching industry and its importance to British Columbians. Lesson plans may be used consecutively or as individual stand-alone lessons.

#### This kit includes classroom activities based on the following structure:

**Activity 1:** Colourful Cattle Names on the Farm

**Activity 2:** What Do Cows Eat?

**Activity 3:** How Many Cattle Can You Count? **Activity 4:** More Than Just on Your Fork!

**Activity 5:** Yummy Foods With Beef!

**Activity 6:** Name that Cow!

**Activity 7:** Careers in the Beef Industry



## **ACTIVITY 1: Colourful Cattle Names on the Farm**

#### **Teacher Background**

The journey of raising beef for food is unique and complex. Due in part to their changing nutritional needs throughout their lifetime, beef cattle will grow and change. In this activity, students will identify key terminology as it relates to cattle and learn to differentiate between cattle at different life stages.

#### **Materials:**

- Whiteboard/chart paper
- Projector
- Computer
- Internet Access
- Student Handouts:
  - Colourful Cattle Names on a Farm Activity Worksheet
- Beef Cattle Who's Who Poster

#### **SCIENCE K-3**

#### **Curricular Competencies**

#### **Questioning and Predicting**

- Demonstrate curiosity about the natural world
- Observe objects and events in familiar contexts
- Ask simple questions about familiar objects and events

#### **Planning and Conducting**

 Make exploratory observations using their senses

# Processing and Analyzing Data & Information

- Experience and interpret the local environment
- Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge
- Discuss observations
- Represent observations and ideas by drawing charts and simple pictographs

#### **Content Connections**

#### Kindergarten

- basic needs of plants and animals
  - include habitat food, water, shelter, and space
- adaptations of local plants and animals
  - adaptations may include structural features or behaviours that allow organisms to survive
  - features may include shape, size, feet, teeth, body covering, eyes, ears
- local First Peoples uses of plants and animals
- living things make changes to accommodate daily and seasonal cycles

#### **Grade 1**

- classification of living and non-living things
- · names of local plants and animals
- structural features of living things in the local environment
- behavioural adaptations of animals in the local environment
- local First Peoples knowledge of the local landscape, plants and animals

#### **SCIENCE K-3 CONTINUED**

#### **Curricular Competencies**

#### **Applying and Innovating**

- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

#### Communicating

- Share observations and ideas orally
- Express and reflect on personal experiences of place

#### **Content Connections**

#### **Grade 2**

- similarities and differences between offspring and parent
- First Peoples use of their knowledge of life cycles
- Local First Peoples' knowledge of conservation

#### Grade 3

- biodiversity in the local environment
- the knowledge of local First Peoples of ecosystems
- energy is needed for life

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

# Comprehend and Connect (reading, listening, viewing)

- Use sources of information and prior knowledge to make meaning
- Use developmentally appropriate reading, listening, and viewing strategies to make meaning
- Explore foundational concepts of print, oral, and visual texts
- Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community
- Use personal experience and knowledge to connect to stories and other texts to make meaning

# Create and communicate (writing, speaking, representing)

- Exchange ideas and perspectives to build shared understanding
- Use language to identify, create, and share ideas, feelings, opinions, and preferences
- Develop and apply expanding word knowledge

#### **Content Connections**

#### Grade K – 3

#### Strategies and processes

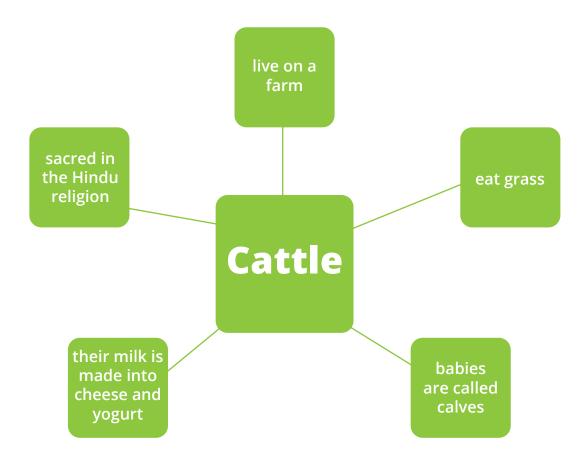
- reading strategies
- oral language strategies
- metacognitive strategies
- writing processes

#### Language features, structures, and conventions

- concepts of print
- letter knowledge
- phonemic and phonological awareness
- letter formation
- sentence structure
- the relationship between reading, writing, and oral language

#### **PROCEDURE**

- 1. Begin by asking students if they have ever been to a farm. Ask students to share what animals they may see on the farm. List these animals on the whiteboard or on chart paper for students to see.
- 2. Next let students know they will be learning about a common farm animal, specifically cattle. Ask them to tell you what they know about cows and cattle. Create a mind map on the board using the facts that students provide. See the example below to assist you:



- 3. Have students watch the following video: <a href="https://www.youtube.com/watch?v=Qja-hTYltkk">https://www.youtube.com/watch?v=Qja-hTYltkk</a> and let them know that there are two types of cattle that are raised in BC dairy (raised for milk) and beef (raised for food).
- 4. Show students "Beef Cattle Who's Who Poster", and discuss correct definitions.
- 5. Watch video about the differences between cows/heifers/bulls/steers: <a href="https://www.youtube.com/watch?v=GA-QnF7]4Wg&t=2s">https://www.youtube.com/watch?v=GA-QnF7]4Wg&t=2s</a>.
- 6. Provide students with a copy of "Colourful Cattle Names on a Farm" worksheet and give them time to complete it.
- 7. Review answers with the class so students may mark their own work.

## **EXTENSION**

- Invite a cattle rancher to come to your classroom to give a presentation to your students on what they do in a typical day.
- Take your students on a fieldtrip to a local cattle ranch. Use the "Tips for Tours Ranch Guides"
   (available at <a href="www.bcaitc.ca/resources">www.bcaitc.ca/resources</a>) for teachers and producers, to help you and the rancher prepare for the fieldtrip.



## **COLOURFUL CATTLE NAMES ON THE FARM**

Colour the CALF brown.
Colour the BULL red.
Colour the COW black.



Use the word in the word bank below to complete the sentences below:

- 1. Another name for cows is: CATTLE.
- 2. Female cattle who have had a baby are called: COW.
- 3. Female cattle who have not had a baby are called: HEIFER.
- 4. A baby cow is called a: CALF.
- 5. Male cattle are also called: BULL.
- 6. The meat that we get from cows is called: BEEF.

## **WORD BANK**

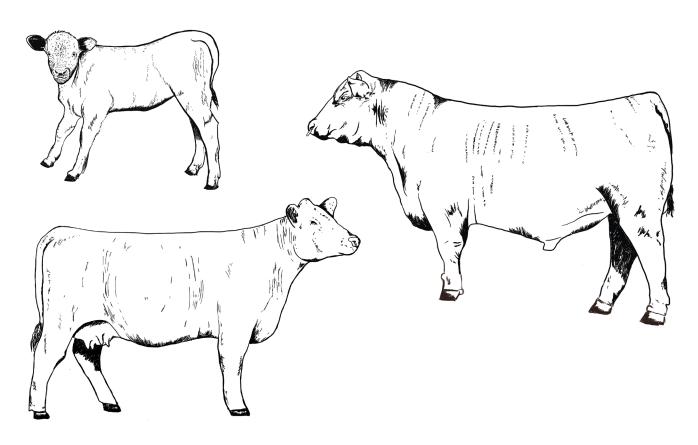
COW BEEF CATTLE CALF HEIFER BULL



ate:
•

## **COLOURFUL CATTLE NAMES ON THE FARM**

Colour the CALF brown.
Colour the BULL red.
Colour the COW black.



Use the word in the word bank below to complete the sentences below:

1. Another name for cows is:
2. Female cattle who have had a baby are called:
3. Female cattle who have not had a baby are called:
4. A baby cow is called a:
5. Male cattle are also called:
6 The meat that we get from cows is called:

WORD BANK

BEEF CATTLE

HEIFER BULL

COW

CALF

# BEEF CATTLE MILOSS WILD







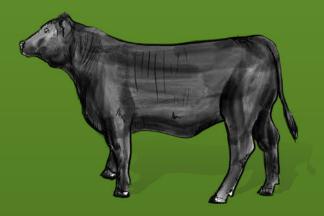
A YOUNG FEMALE OR MALE BOVINE

**HEIFER** 

A FEMALE BOVINE WHO HAS NOT YET HAD A CALF

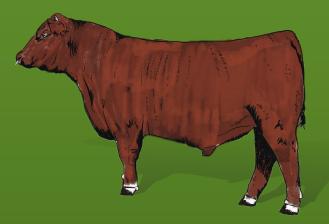
COW

A FEMALE BOVINE WHO HAS HAD AT LEAST ONE CALF



**STEER** 

A MALE BOVINE WHO HAS BEEN CASTRATED



BULL

A MATURE MALE BOVINE USED FOR BREEDING





#### **ACTIVITY 2:** What Do Cows Eat?

#### **Teacher Background**

Cows are herbivores which means they eat plants and vegetation. In Canada, the most common food for cows is grasses. Canadian beef cows might also get important nutrients from crops such as corn, barley, alfalfa hay, oats, and soybeans. In this activity students will have the opportunity to investigate what cows eat while building their letter knowledge as well as phonemic and phonological awareness.

#### **Materials:**

- Whiteboard/chart paper
- Projector
- Computer
- Internet Access
- Student Handout:
  - What Do Cows Eat?

#### **SCIENCE K-3**

#### **Curricular Competencies**

#### **Questioning and Predicting**

- Demonstrate curiosity about the natural world
- Observe objects and events in familiar contexts
- Ask simple questions about familiar objects and events.

#### **Planning and Conducting**

 Make exploratory observations using their senses

# Processing and Analyzing Data & Information

- Experience and interpret the local environment
- Discuss observations
- Represent observations and ideas by drawing charts and simple pictographs

#### Applying and innovating

- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

#### **Content Connections**

#### Kindergarten

- basic needs of plants and animals
  - include habitat food, water, shelter, and space
- adaptations of local plants and animals
  - may include structural features or behaviours that allow organisms to survive
  - features may include shape, size, feet, teeth, body covering, eyes, ears
- local First Peoples uses of plants and animals
- living things make changes to accommodate daily and seasonal cycles

#### **Grade 1**

- classification of living and non-living things
- names of local plants and animals
- structural features of living things in the local environment
- behavioural adaptations of animals in the local environment
- local First Peoples knowledge of the local landscape, plants and animals

#### **SCIENCE K-3 CONTINUED**

#### **Curricular Competencies**

#### Communicating

- · Share observations and ideas orally
- Express and reflect on personal experiences of place

#### **Content Connections**

#### Grade 2

- similarities and differences between offspring and parent
- First Peoples use of their knowledge of life cycles
- Local First Peoples' knowledge of conservation

#### **Grade 3**

- biodiversity in the local environment
- the knowledge of local First Peoples of ecosystems
- energy is needed for life

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

# Comprehend and Connect (reading, listening, viewing)

- Use sources of information and prior knowledge to make meaning
- Use developmentally appropriate reading, listening, and viewing strategies to make meaning
- Explore foundational concepts of print, oral, and visual texts
- Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community
- Use personal experience and knowledge to connect to stories and other texts to make meaning

# Create and communicate (writing, speaking, representing)

- Exchange ideas and perspectives to build shared understanding
- Use language to identify, create, and share ideas, feelings, opinions, and preferences
- Develop and apply expanding word knowledge

#### **Content Connections**

#### Grade K – 3

#### Strategies and processes

- · reading strategies
- oral language strategies
- metacognitive strategies
- writing processes

#### Language features, structures, and conventions

- concepts of print
- letter knowledge
- phonemic and phonological awareness
- letter formation
- sentence structure
- the relationship between reading, writing, and oral language

#### **PROCEDURE**

- 1. Begin by asking students if they know what cows eat. Ask students to share their responses. List these foods on the whiteboard or on chart paper for students to see.
- 2. Next let students know that cows, like many large mammals, are herbivores. Let them know that herbivores are animals that eat plants to survive.
- 3. Share with students the digital booklet, *Where Does Canadian Beef Come From?*, which can be accessed here: <a href="https://www.raisingcdnbeef.ca/where-does-beef-come-from/">https://www.raisingcdnbeef.ca/where-does-beef-come-from/</a>
- 4. Once the digital booklet is completed, provide students with a copy of the handout, "What Do Cows Eat?" and provide them with some time to complete the assignment.

#### **EXTENSION**

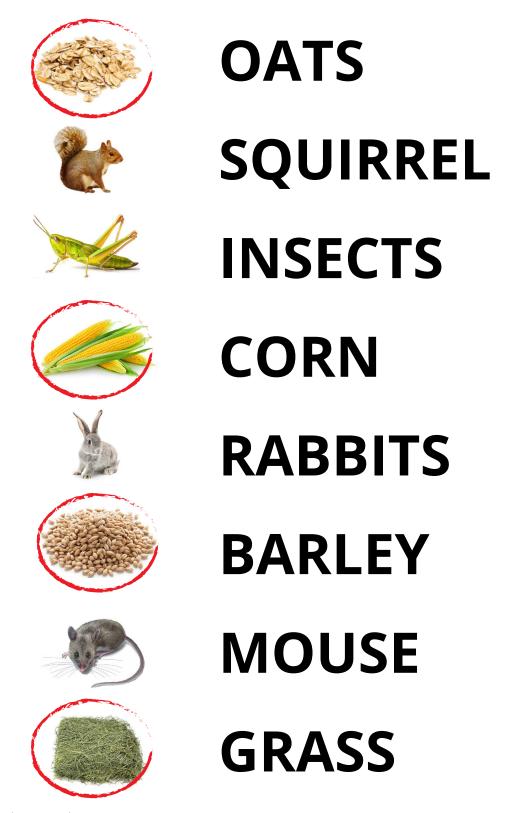
- Take your students on a fieldtrip to a local cattle ranch to check out their feedlot or feed yard. Use the "Tips for Tours Ranch Guides" (available at <a href="www.bcaitc.ca/resources">www.bcaitc.ca/resources</a>) for teachers and producers to help you and the rancher prepare for the fieldtrip.
- Invite a feedlot manager to discuss a typical day and the different available types of cattle feed with your class.



## WHAT DO COWS EAT?

Cows are herbivores. This means that they only eat plants. Look at the pictures below and fill in the blanks with the name of the item.

Circle in RED the things that cows would eat.



Name: \_\_\_\_\_\_ Date: \_\_\_\_\_

## WHAT DO COWS EAT?

Cows are herbivores. This means that they only eat plants. Look at the pictures below and fill in the blanks with the name of the item.

Circle in RED the things that cows would eat.

-William

**O**\_\_ \_ \_



S \_\_ \_ \_ \_ \_



I \_\_\_ \_\_ \_\_



C \_\_ \_ \_



R \_\_\_ \_\_ \_



B \_\_ \_ \_ \_



M \_\_ \_ \_



G \_\_ \_ \_

## **ACTIVITY 3:** How Many Cattle Can You Count?

#### **Teacher Background**

The major curricular competencies in the primary mathematics curriculum include using reasoning to explore and make connections, developing mental math strategies and abilities to make sense of quantities, visualizing to explore mathematical concepts, and engaging in problem-solving experiences that are connected to place, story, and the local community. In this activity, students will have the opportunity to practice number concepts and ways to make 10 using addition.

#### **Materials:**

- Student Handout:
  - How Many Cattle Can you Count?

#### **MATHEMATHICS K-3**

#### **Curricular Competencies**

#### **Reasoning and Analyzing**

- Use reasoning to explore and make connections
- Estimate reasonably
- Develop mental math strategies and abilities to make sense of quantities
- Model mathematics in contextualized experiences

#### **Understanding and Solving**

- Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
- Visualize to explore mathematical concepts
- Develop and use multiple strategies to engage in problem solving
- Engage in problem solving experiences that are connected to place, story, the local community, and other cultures

#### **Communicating and representing**

- Communicate mathematical thinking in many ways
- Use mathematical vocabulary and language to contribute to mathematical discussions
- Represent mathematical ideas in concrete, pictorial, and symbolic forms

#### **Content Connections**

#### Kindergarten

- number concepts to 10
- ways to make 5
- decomposition of numbers to 10
- repeating patterns with two or three elements
- change in quantity to 10, using concrete materials

#### Grade 1

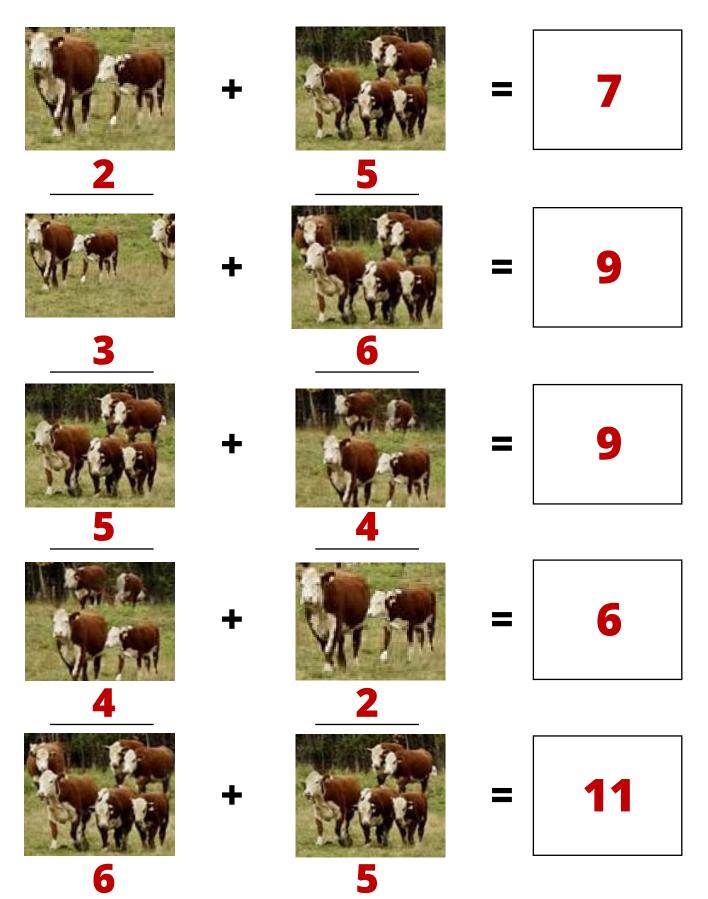
- number concepts to 20
- ways to make 10
- addition and subtraction to 20 (understanding of operation and process)
- repeating patterns with multiple element and attributes
- change in quantity to 20, concretely and verbally
- concrete graphs, using one-to-one correspondence

#### Grade 2-3

- number concepts to 100
- addition and subtraction facts to 20 (introduction of computational strategies)
- addition and subtraction to 100
- repeating and increasing patterns
- change in quantity, using pictorial and symbolic representation
- pictorial representation of concrete graphs, using oneto-one correspondence



## **HOW MANY CATTLE CAN YOU COUNT?**



Name: \_\_\_\_\_ Date:\_\_\_\_

# **HOW MANY CATTLE CAN YOU COUNT?**



+





WAY !

+



=





+



=





+







4



## **ACTIVITY 4:** More Than Just on Your Fork!

#### **Teacher Background**

Steaks, hamburgers, and pot roast...when most students start thinking about what comes from a cow, these probably come to mind fairly easily. It's probably fairly safe to say that most would also tell you that milk, and maybe even leather comes from cows. Most students, however, would be surprised to find out that candles, cosmetics, crayons, and cement are also derived from beef by-products. This activity shows some of the products made from cattle and where they come from. Students learn about how much agriculture impacts their daily lives through more than just the food on their plates and illustrates how we use these many by-products from beef.

#### **Materials:**

- Internet access
- Computers
- Student handout:
  - More Than Just on Your Fork!
- Selection of about 5 products derived from beef by-products (shampoo, hand cream, wall paper, perfume, candles, felt, medicines, glue, string, paint, etc.)

#### **SOCIAL STUDIES K-3**

#### **Curricular Competencies**

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
- Explain the significance of personal or local events, objects, people, or places (significance)
- Ask questions, make inferences, and draw conclusions about the content and features of different types of sources (evidence)
- Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change)
- Acknowledge different perspectives on people, places, issues, or events in their lives (perspective)

#### **Content Connections**

#### Kindergarten

 people, places, and events in the local community, and in local First Peoples communities

#### Grade 1-3

- characteristics of the local community that provide organization and meet the needs of the community
- how people's needs and wants are met in communities
- relationships between a community and its environment

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

# Comprehend and Connect (reading, listening, viewing)

- Use sources of information and prior knowledge to make meaning
- Use developmentally appropriate reading, listening, and viewing strategies to make meaning
- Explore foundational concepts of print, oral, and visual texts

# Create and Communicate (writing, speaking, representing)

- Use language to identify, create, and share ideas, feelings, opinions, and preferences
- Develop and apply expanding word knowledge

#### **Content Connections**

# **Kindergarten - Grade 3 Strategies and processes**

- reading strategies
- metacognitive strategies

#### Language features, structures, and conventions

- concepts of print
- letter knowledge
- phonemic and phonological awareness

#### **PROCEDURE**

- 1. Display the variety of products derived from beef by-products.
- 2. Ask students what they think all these products have in common. After guesses and discussion, share with them that all come from beef cattle. Tell students that we usually think of all the various cuts of meat when thinking of beef cattle but there are many other byproducts that come from beef cattle as well.
- 3. Watch the video together as a class: <a href="https://www.youtube.com/watch?v=lGwoOihpBOY">https://www.youtube.com/watch?v=lGwoOihpBOY</a>.
- 4. Once the video is complete, provide students with a copy of the handout, "More Than Just on your Fork!" and provide them with some time to complete the assignment.
- 5. When the majority of students have completed this handout, mark the sheets as a class, elaborating on answers as needed if any questions arise.
- 6. As an Exit Slip, have students provide the name of a product that comes from beef that is not meat.

#### **EXTENSION**

 Ask your students to check around their house and make a list of all non-food products that they use that have beef by-products in them

#### **TEACHER INFORMATION**

#### **Canadian Statistics:**

- Animals fats are also being used to make biojet fuel in Canada.
- There are 60,000 beef farms and feedlots in Canada.
- Canada produces approximately 1.55 million tonnes of beef per year.



## **MORE THAN JUST ON YOUR FORK!**

What do shampoo, and chalk and wallpaper have in common? They are all made from different parts of a cow! Can you help find the following beef by-products in the word search?



CRAYONS CREAM WALLPAPER
VITAMINS CANDLES RUBBER
GLUE PERFUME FERTILIZER
STRING MEDICINE DYES

PAINT FELT

We know beef and milk come from cows. Other common by-products are plastic, cement and paint brushes, gum, matches, and creams. There are many more ways we use all the parts of a cow in our lives every day!



Name:	Date:

## **MORE THAN JUST ON YOUR FORK!**

What do shampoo, and chalk and wallpaper have in common? They are all made from different parts of a cow! Can you help find the following beef by-products in the word search?

GLVITAMINS
LSMEDICINE
UBTPERFUME
EFCRAYONSF
FERTILIZER
BLYINNCCNP
ITDYESGRAA
WALLPAPERI
CANDLESAWN
RUBBERIMET

CRAYONS CREAM WALLPAPER

VITAMINS CANDLES RUBBER

GLUE PERFUME FERTILIZER

STRING MEDICINE DYES

PAINT FELT

We know beef and milk come from cows. Other common by-products are plastic, cement and paint brushes, gum, matches, and creams. There are many more ways we use all the parts of a cow in our lives every day!



## **ACTIVITY 5:** Yummy Foods with Beef!

#### **Teacher Background**

Beef is a nutritious food that is a good source of protein, iron, vitamins and minerals. In this activity, students will investigate different foods prepared with beef while practicing word formation and phonemic and phonological awareness.

#### **Materials:**

- Whiteboard/chart paper
- Projector
- Computer
- Internet Access
- Student Handout:
  - -Yummy Foods With Beef

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

# Comprehend and Connect (reading, listening, viewing)

- Use sources of information and prior knowledge to make meaning
- Use developmentally appropriate reading, listening, and viewing strategies to make meaning
- Explore foundational concepts of print, oral, and visual texts
- Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community
- Use personal experience and knowledge to connect to stories and other texts to make meaning

# Create and communicate (writing, speaking, representing)

- Exchange ideas and perspectives to build shared understanding
- Use language to identify, create, and share ideas, feelings, opinions, and preferences
- Develop and apply expanding word knowledge

#### **Content Connections**

# Grade K-3 Strategies and processes

- reading strategies
- metacognitive strategies

# Language features, structures, and conventions

- concepts of print
- letter knowledge
- phonemic and phonological awareness

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

#### **Healthy and Active Living**

- Explore and describe strategies for making healthy eating choices in a variety of settings
- Describe ways to access information on and support services for a variety of health topics
- Explore and describe strategies for pursuing personal healthy-living goals

#### **Content Connections**

#### Grade K - 3

- relationships between food, hydration, and health
- practices that promote health and well-being, including those
- relating to physical activity, nutrition, and illness
- prevention
- strategies for accessing health information

#### **PROCEDURE**

- 1. Have students use a laptop or computer to access and watch the video: Catch the Sizzle at: <a href="https://www.youtube.com/watch?v=LOox02dxlew">https://www.youtube.com/watch?v=LOox02dxlew</a>
- 2. While watching the video, ask students to try to identify different foods that appear on the screen, and what method has been used to prepare them.
- 3. Ask students to share with a partner what their favourite food made of beef is.
- 4. Provide students with the "Yummy Foods With Beef" handout and give students time to complete it.
- 5. Once most students have had some time to complete the worksheet, review answers together as a class.

## **EXTENSION**

- Check out the website <a href="https://canadabeef.ca/">https://canadabeef.ca/</a> on nutrition and health benefits of beef and try out some delicious beef recipes.
- Host a feast to celebrate a class milestone and have students bring in their favourite beef dish to share with their classmates.
- Have students' survey classmates to find out which beef dishes are the most popular. Use bar graphs to represent the results.



## YUMMY FOODS WITH BEEF

Our bodies need food to give us energy and help us grow. You stay healthy, and have a balanced diet by eating different types of foods. Beef is one kind of meat you can eat. Beef comes from cattle. It is a good source of protein, iron, vitamins and minerals.

There are many different foods you can make from beef. In the spaces below, unscramble the words to find the 5 common beef dishes. Draw and colour them in the space provided.

SCRAMBLED WORDS	UNSCRAMBLED WORDS	YOUR DRAWING
GSALNAA	LASAGNA	
ACOTS	TACOS	
UEMBRHRGA	HAMBURGER	
LAMLETBAS	MEATBALLS	
SRTOA	ROAST	

Name:	Date:
	Date.

## YUMMY FOODS WITH BEEF

Our bodies need food to give us energy and help us grow. You stay healthy, and have a balanced diet by eating different types of foods. Beef is one kind of meat you can eat. Beef comes from cattle. It is a good source of protein, iron, vitamins and minerals.

There are many different foods you can make from beef. In the spaces below, unscramble the words to find the 5 common beef dishes. Draw and colour them in the space provided.

SCRAMBLED WORDS	UNSCRAMBLED WORDS	YOUR DRAWING
GSALNAA	LASAGNA	
ACOTS		
UEMBRHRGA		
LAMLETBAS		
SRTOA		

#### **ACTIVITY 6:** Name That Cow!

#### **Teacher Background**

The beef industry is important to British Columbia's economy and supports many family and community businesses. This review activity will allow students to demonstrate their understanding of beef cattle.

#### **Materials:**

- Whiteboard/chart paper
- Projector / Computer
- Internet Access
- Student Handout:
  - Name that Cow! Worksheet
- Beef Cattle Who's Who Poster

#### **SCIENCE K-3**

#### **Curricular Competencies**

#### **Questioning and Predicting**

- Demonstrate curiosity about the natural world
- Observe objects and events in familiar contexts
- Ask simple questions about familiar objects and events

#### **Planning and Conducting**

 Make exploratory observations using their senses

## Processing and Analyzing Data and Information

- Experience and interpret the local environment
- Discuss observations
- Represent observations and ideas by drawing charts and simple pictographs

#### **Applying and Innovating**

- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

#### **Content Connections**

#### Kindergarten

- · basic needs of plants and animals
  - include habitat food, water, shelter, and space
- adaptations of local plants and animals
  - may include structural features or behaviours that allow organisms to survive
  - features may include shape, size, feet, teeth, body covering, eyes, ears
- local First Peoples uses of plants and animals
- living things make changes to accommodate daily and seasonal cycles

#### **Grade 1**

- classification of living and non-living things
- names of local plants and animals
- structural features of living things in the local environment
- behavioural adaptations of animals in the local environment
- local First Peoples knowledge of the local landscape, plants and animals

#### **Grade 2**

- similarities and differences between offspring and parent
- First Peoples use of their knowledge of life cycles
- Local First Peoples' knowledge of conservation

#### **SCIENCE K-3 CONTINUED**

#### **Curricular Competencies**

#### **Content Connections**

#### Communicating

- Share observations and ideas orally
- Express and reflect on personal experiences of place

#### **Grade 3**

- biodiversity in the local environment
- the knowledge of local First Peoples of ecosystems
- energy is needed for life

#### **ENGLISH LANGUAGE ARTS K-3**

#### **Curricular Competencies**

# Comprehend and Connect (reading, listening, viewing)

- Use sources of information and prior knowledge to make meaning
- Use developmentally appropriate reading, listening, and viewing strategies to make meaning
- Explore foundational concepts of print, oral, and visual texts
- Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community
- Use personal experience and knowledge to connect to stories and other texts to make meaning

# Create and communicate (writing, speaking, representing)

- Exchange ideas and perspectives to build shared understanding
- Use language to identify, create, and share ideas, feelings, opinions, and preferences
- Develop and apply expanding word knowledge

#### **Content Connections**

# Grade K - 3 Strategies and processes

- reading strategies
- oral language strategies
- metacognitive strategies
- writing processes

# Language features, structures, and conventions

- concepts of print
- letter knowledge
- phonemic and phonological awareness
- letter formation
- sentence structure
- the relationship between reading, writing, and oral language

#### **SOCIAL STUDIES K-3**

#### **Curricular Competencies**

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
- Explain the significance of personal or local events, objects, people, or places (significance)
- Ask questions, make inferences, and draw conclusions about the content and features of different types of sources (evidence)
- Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change)
- Acknowledge different perspectives on people, places, issues, or events in their lives (perspective)

#### **Content Connections**

#### Kindergarten

 people, places, and events in the local community, and in local First Peoples communities

#### Grade 1-3

- characteristics of the local community that provide organization and meet the needs of the community
- how people's needs and wants are met in communities
- relationships between a community and its environment

#### **PROCEDURE**

- 1. Provide students with a copy of the "Name that Cow!" student worksheet.
- 2. Review "Beef Cattle Who's Who Poster" from Activity 1, with students and discuss definitions and their differences. (If students did not complete Activity 1, can also show video <a href="https://www.youtube.com/watch?v=GA-QnF7J4Wg&t=2s">https://www.youtube.com/watch?v=GA-QnF7J4Wg&t=2s</a>).
- 3. Have students fill in the chart with the word(s) that best fit. The possible word choices are: cow, bull, heifer, and calf.
- 4. Next, students can colour the picture that match the sentences on the worksheet provided. Remind students that they may colour more than one picture for each sentence.
- 5. When the majority of students have finished the activity, mark the sheet as a class, elaborating on answers as needed.



## **NAME THAT COW!**

Fill in the chart with the word(s) that best fit.
Colour the picture that match the sentences. You may colour more than one picture for each sentence.

		CALF	BULL	HEIFER	cow
I am an adult cow.	EXAMPLE: Cow, Heifer and Bull				
I can make milk for my young.	cow				
I am an adult female who has had babies.	cow				
I am a baby cow.	CALF				
I am an adult female that has not had babies.	HEIFER				
I have 4 stomach compartments.	COW HEIFER BULL		1		
I like to graze on grass.	COW HEIFER BULL CALF		1		R
I drink my mother's milk.	CALF				



Name:	Date:
-------	-------

## **NAME THAT COW!**

Fill in the chart with the word(s) that best fit.
Colour the picture that match the sentences. You may colour more than one picture for each sentence.

		CALF	BULL	HEIFER	cow
l am an adult cow.	<b>EXAMPLE:</b> Cow, Heifer and Bull		1		
I can make milk for my young.					
l am an adult female who has had babies.					
l am a baby cow.					
I am an adult female that has not had babies.					
I have 4 stomach compartments.					
I like to graze on grass.					
I drink my mother's milk.					

## **ACTIVITY 7:** Careers in the Beef Industry

#### **Teacher Background**

The production of beef involves many different people, therefore there are many career opportunities available in BC's Beef Industry. As it moves from the ranch to table, there are a number of people in a wide variety of jobs that assist with the process. Everything from a veterinarian, animal nutritionist, feedlot manager, auctioneer, grocery store clerk and more are involved. In this lesson, students will explore the many career opportunities offered by the beef industry and how each one contributes to the process of beef production in BC.

#### **Materials:**

- Whiteboard/chart paper
- Career Profile Cards, cut
- Student Handout:
  - Who Brings Food to My Table?

#### **CAREER EDUCATION K-3**

#### **Curricular Competencies**

# Students are expected to be able to do the following:

- Identify and appreciate their personal attributes, skills, interests, and accomplishments and their growth over time
- Recognize the need for others who can support their learning and personal growth
- Set realistic short- and longer-term learning goals, define a path, and monitor progress
- Make connections between effective work habits and success
- Demonstrate safe behaviours in a variety of environments
- Question self and others about the role of technology in the changing workplace
- Appreciate the influence of peer relationships, family, and community on personal choices and goals

#### **Content Connections**

#### Grade K - 3

#### **Personal Development**

- goal-setting strategies
- self-assessment
- project management
- leadership
- problem-solving and decision-making strategies

#### **Connections to Community**

- local and global needs and opportunities
- cultural and social awareness
- global citizenship
- volunteer opportunities

#### Life and Career Plan

- factors affecting types of jobs in the community
- technology in learning and working
- role of mentors, family, community, school, and personal network in decision making

#### **SOCIAL STUDIES K-3**

#### **Curricular Competencies**

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
- Explain the significance of personal or local events, objects, people, or places (significance)
- Ask questions, make inferences, and draw conclusions about the content and features of different types of sources (evidence)
- Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change)
- Acknowledge different perspectives on people, places, issues, or events in their lives (perspective)

#### **Content Connections**

#### Kindergarten

 people, places, and events in the local community, and in local First Peoples communities

#### Grade 1-3

- characteristics of the local community that provide organization and meet the needs of the community
- how people's needs and wants are met in communities
- relationships between a community and its environment

#### **PROCEDURE**

- 1. Provide students with one of the Career Profile Cards (1 per student).
- 2. Create a T-chart on the board with the following headings: "Jobs in the Beef Industry that Work with the Live Animal" and "Jobs in the Beef Industry that help with Selling"
- 3. Explain to students that one-side of the chart will focus on careers directly related to the animal itself and the other side will focus on careers that help market/sell the beef to consumers. Ask students to place their Career Profile card under the correct heading and have them be prepared to share why.
- 4. Have students explain why they chose to place their Career Profile Card under a certain heading and briefly go over the different careers (from the cards)
- 5. Provide students with the "Who Helps Bring Food to My Table" worksheet.
- 6. Ask students to select a career from those provided on the profile cards and complete the worksheet (Students do not necessarily need to select the career profile that was provided to them at the beginning).

#### **EXTENSION**

• Have each student research in depth about one of the job profiles. Organize a career fair where students can dress up and answer questions about their occupation.



## **CAREER PROFILE CARDS**

# Jobs in the Beef Industry that Work with the Live Animal

#### **Grain Farmer:**

grow hay and grain to feed cows

#### **Animal Nutritionist:**

help formulate balanced rations for cattle

#### Agricultural Worker:

feed, water and care for the animals on a regular basis; move cattle between the barn and pasture as necessary

#### Veterinarian:

help care for and treat sick cows

#### Feedlot Manager:

help determine food type/quantity for cattle as they grow

#### Animal Scientist:

study animal traits from parents to offspring

# Jobs in the Beef Industry that help with Selling

#### Auctioneer or Livestock Market Manager:

assist farmers in selling cattle

#### Cattle Buyer:

buy cattle for processing facilities or feetlots

#### Truck Driver:

transports cattle to processing facilities then to stores

#### **Heavy Equipment Operator:**

loading and unloading of products

#### Food Safety Inspector:

checks that government food regulations are being followed so that food is safe to eat

#### Farm Reporter or Broadcaster

write or give news reports on cattle markets and cattle prices

#### Butcher/Meat Packer:

process animals and divide their carcasses into sections; package meat for shipment

#### **Price Coordinator:**

makes sure prices are fair and accurate

#### Marketing Manager:

create advertising to sell farm products

#### Store Owner:

sells beef raised on ranches



Name:	Date:
-------	-------

## **CAREER PROFILE CARDS**

<b>Grain Farmer:</b> grow hay and grain to feed cows	<b>Veterinarian:</b> help care for and treat sick cows
<b>Animal Nutritionist:</b> help formulate balanced rations for cattle	Animal Scientist: study animal traits from parents to offspring
<b>Agricultural Worker:</b> feed, water and care for the animals on a regular basis; move cattle between the barn and pasture as necessary	<b>Feedlot Manager:</b> help determine food type/quantity for cattle as they grow
Butcher/Meat Packer: process animals and divide their carcasses into sections; package meat for shipment	<b>Marketing Manager:</b> create advertising to sell farm products
<b>Truck Driver:</b> transports cattle to processing facilities then to stores	<b>Store Owner:</b> sells beef raised on ranches
Farm Reporter or Broadcaster write or give news reports on cattle markets and cattle prices	Auctioneer or Livestock Market Manager: assist farmers in selling cattle
<b>Cattle Buyer:</b> buy cattle for processing facilities or feetlots	Heavy Equipment Operator: loading and unloading of products
Food Safety Inspector: checks that government food regulations are being followed so that food is safe to eat	<b>Price Coordinator:</b> makes sure prices are fair and accurate

Name:	Date:

## WHO BRINGS FOOD TO MY TABLE?

**Directions:** Fill in the following information through pictures or words. Include a self portrait of you working in the job in the centre circle.

WHAT DO I DO?	WHAT DO I WEAR?
WHAT TOOLS DO I USE?	HOW DO I HELP PEOPLE?