

BEEF MODULE

MOVING AGRICULTURE TO THE CLASSROOM



BIG BOOK OF BEEF



 **Idaho
Farm Bureau**
The Voice of Idaho Agriculture



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Module: Beef

Objectives: After Completion of this module, students will be able to:

1. Understand the life cycle of beef cattle
2. Understand the importance of cows.
3. Discuss where beef comes from.
4. Understand how ranchers take care of their animals
5. Understand how livestock can help with fire prevention
6. Have a basic understanding of the importance of beef byproducts

Instruction Time: 20 minutes

Resources:

Materials Provided:

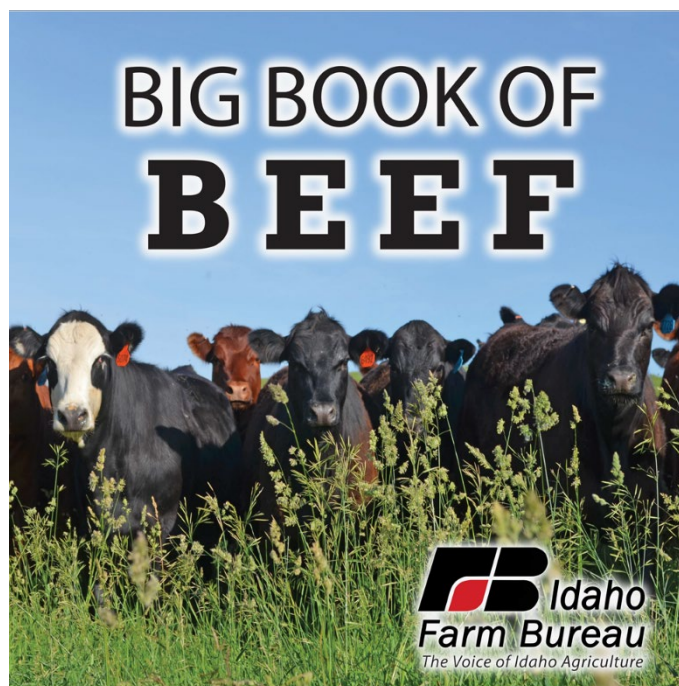
- Big Book of Water
- Easel

Materials needed:

Teaching Strategies (Content Delivery):

Objective 1: Understand what everything cattle and other livestock are used for. The teacher is encouraged to ask questions of the class to identify these facts. Set up the easel and place the Big Book of Beef on the easel, and have the students sit in front of the easel on the ground.

- **Cover Page-Big Book of Beef**
 - Turn the cover page (May have a student come up and help turn the page.)



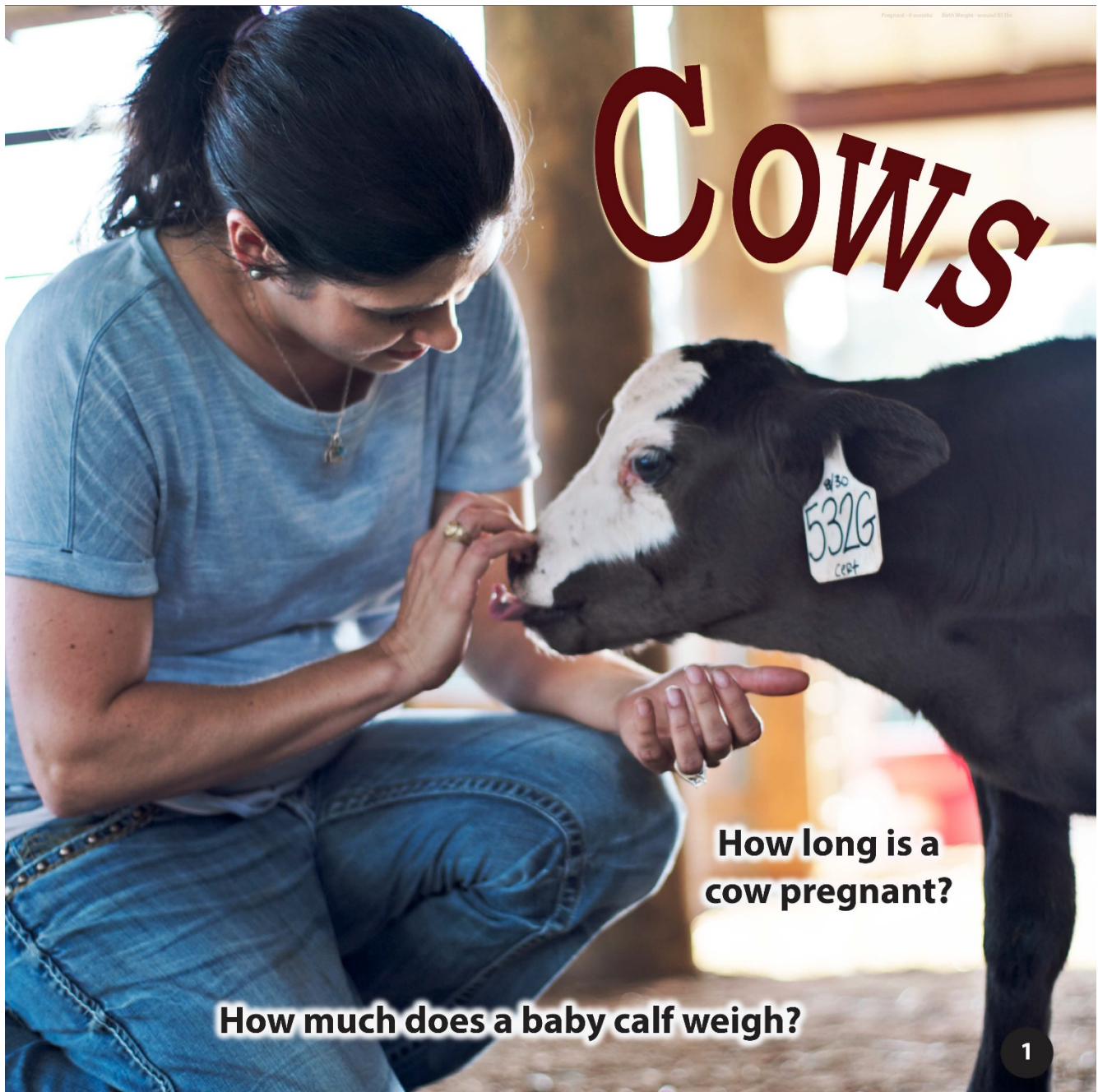
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Objective 2: discuss the birth of a calf.

- Page 1- Cows



- **How long is a cow pregnant?**
 - 9 months (like a human)
- **How much does a baby calf weigh?**
 - 85 pounds or between 60-100 pounds



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Objective 3: Show how ranchers take care of their animals

- Page 2- Health & Identification



- **Who helps take care of the cows?**
 - Rancher, cowboys, and veterinarians
- **Why do ranchers brand, vaccinate, and tag?**
 - Brands- keep the cows in the correct herd
- Vaccinations help calves from getting sick
- Tags help keep calves with their mothers.



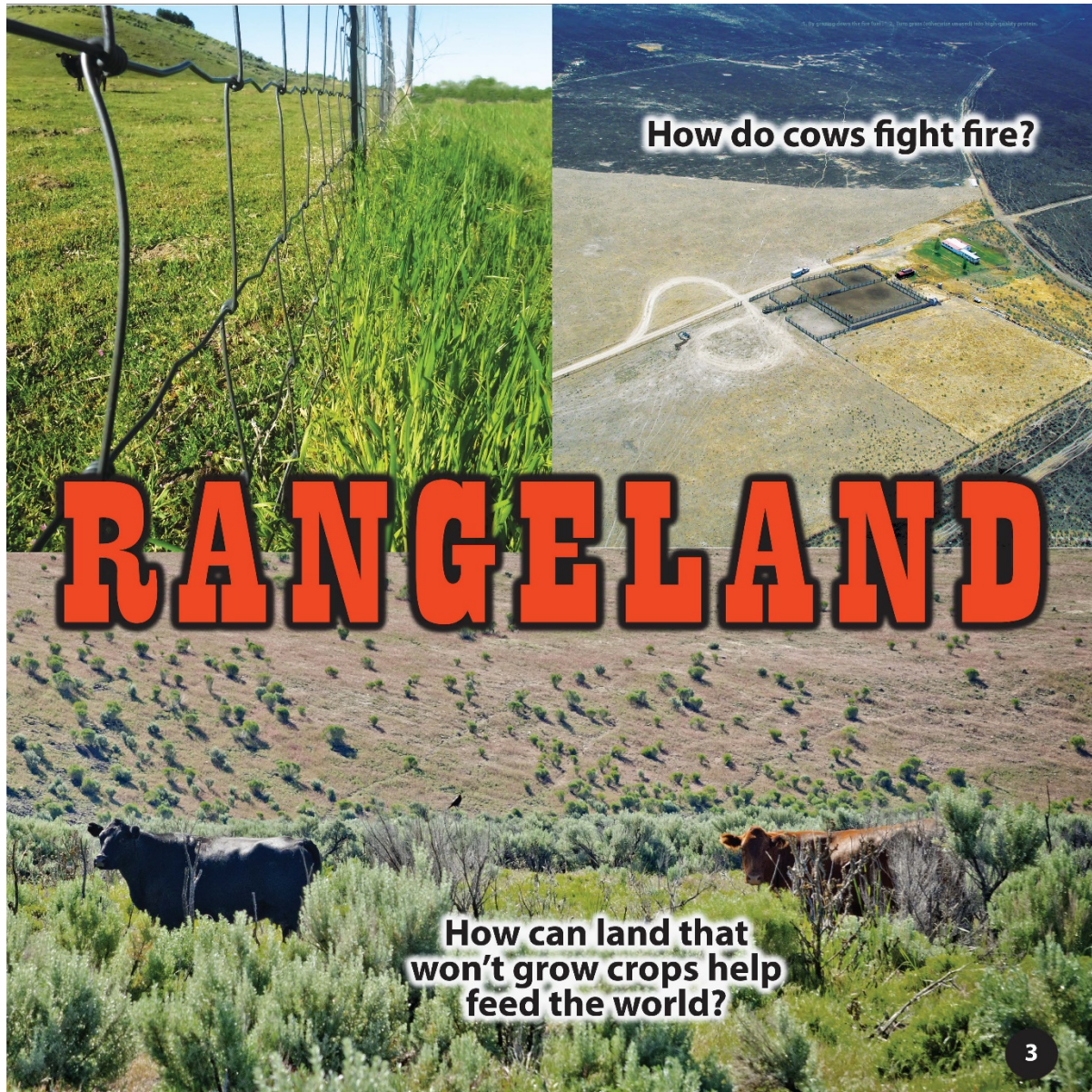
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Objective 4: Why do cattle spend some of their time on the range?

- Page 3-Rangeland



- **Point out the two sides of the fence in the top left. One has been grazed and one has not when those fields dry up which will be more likely to burn?**
- **How do cows fight fire?**
 - Livestock can help fight fire by eating vegetation that would otherwise become fire fuel.
- **How can land that won't grow crops help feed the world?**
 - There are many areas of the world where crops can't be grown but livestock can utilize the forage in these areas and create protein.

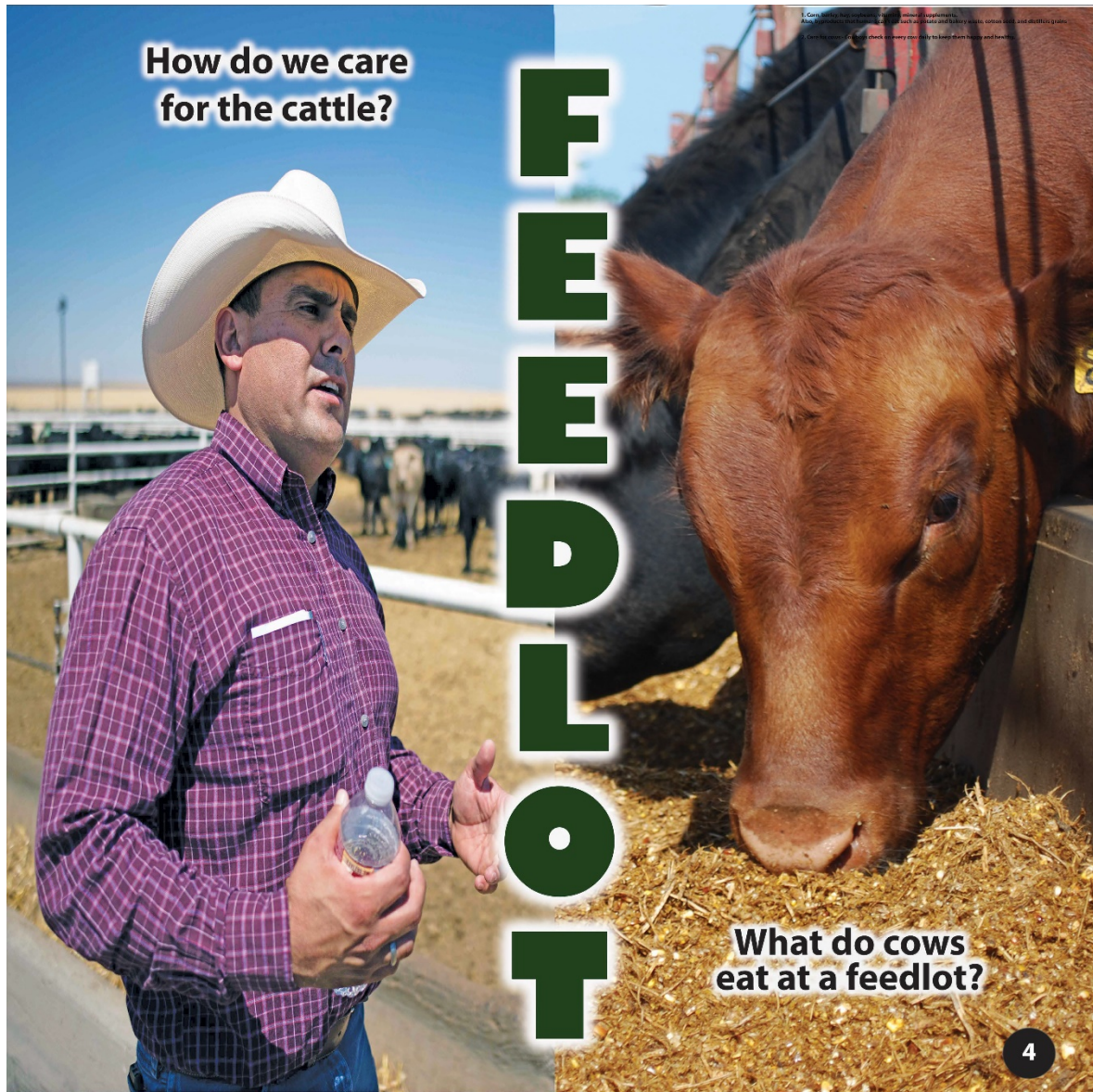
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Objective 5: Show how animals are cared for and kept healthy

- Page 4- Feedlot



- **How do we care for the cattle?**
 - Feedlots have cowboys who look at all the cows every single day.
 - Cows are given medicine if they are sick.
 - They are also kept comfortable with lots of food and water.
- **What do cows eat at a feedlot?**
 - Hay, corn, barley, soybean, vitamins, mineral supplements
 - Also, byproducts that humans can't eat such as potato and bakery waste, cotton seed, distillers' grains, and sugar beets pellets.
 - Most animals eat better than we do. All their meals are specially selected to help them be healthy.



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- Page 5- Processing for Food

PROCESSING FOR FOOD

CHUCK **RIB** **SHORT LOIN** **SIRLOIN** **ROUND**
BRISKET **SHANK** **PLATE** **FLANK**

How many pounds of beef can an average cow produce?

If quarter pound hamburgers were served for lunch, how many students could one cow feed?

5

- Point out the names of the commercial cuts to see if any of the students have ever heard of those cuts.
- How many pounds of beef can an average cow produce?
 - around 440 pounds of beef from each cow.
- If quarter pound hamburgers were served for lunch, how many students could one cow feed?
 - 1760 (this is a math problem if the students have been taught fractions, and multiplication)



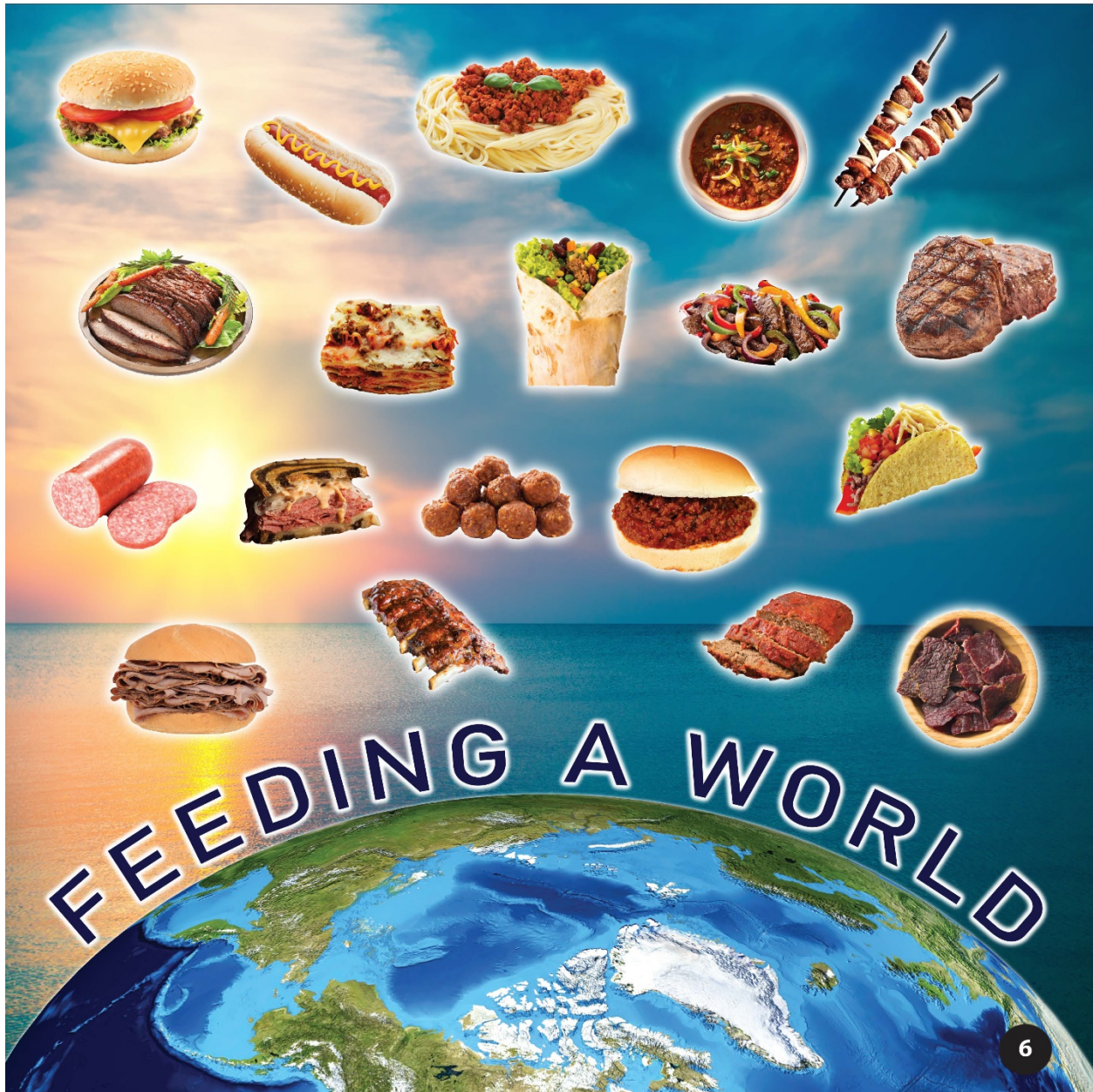
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Objective 6: Show all the delicious food made from beef.

- Page 6- Feeding the World



- Have students name their favorite beef meal.

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Objective 7: show that cows are way more than beef

• **Page 7- Byproducts**

Hair

1. Air filters
2. Brushes
3. Felt
4. Insulation
5. plaster
6. textiles

Skin

1. Gelatin
2. Flavorings
3. emery boards
4. Sheetrock
5. Wallpaper
6. Adhesives
7. Medicines
8. Candles
9. Confectionary

Brain

1. Anti aging cream
2. Medicines

Internal Organs

1. Instruments strings
2. Tennis racquet strings
3. Hormones
4. Enzymes
5. Vitamins
6. Other medical materials

Bones

1. Refined sugar
2. Charcoal
3. Fertilizer
4. Glass

Manure Fertilizer

1. Nitrogen
2. Phosphorous

Hooves/ Horns

1. Adhesives
2. Plastics
3. pet food
4. Plant food
5. Shampoo and conditioner
6. Emery boards
7. Lamination
8. Wallpaper
9. Plywood

Blood

1. Pasta
2. imitation eggs
3. Cake mixes
4. Dyes and inks
5. Adhesives
6. Minerals
7. Medicines
8. Laboratory research materials

Milk

1. Adhesives
2. Plastics
3. Cosmetics
4. Medicines

Fat

1. Chewing gum
2. Candles
3. Detergents
4. Fabric softener
5. Deodorant
6. Shaving cream
7. Perfume
8. Pet food
9. Cosmetics
10. Creams and lotions
11. Crayons
12. Paint
13. Oils and lubricants
14. Biodiesel
15. Plastics
16. Waterproofing agents
17. Cement
18. Ceramics
19. Chalk
20. Explosives
21. Fireworks
22. Matches
23. Fertilizer
24. Antifreeze
25. Insulation
26. Linoleum
27. Rubber
28. Textiles
29. Medicines

- **Work the student through the lists to show everything that we get from cows that isn't meat.**
 - Sports equipment, shoes, tires, fertilizer, medicine, cement, makeup, tape, gum, shampoo, glass, and fireworks just to name a few.

