



WOW that COW! - Cattle By-products

Created by Rebecca Been for the Kern County CattleWomen
For Questions Contact: Rebecca Been @ kcteachersag@aol.com

A lesson to show the diverse products that cattle give to enrich our lives!

Target Audience: K-4th

Materials Needed:

Cattleville Worksheet
Pencils / Crayons

Optional Materials:

Cattleville Poster or Overhead
Cattle Candy - candy corn, marshmallows, Jolly Ranchers,
gum balls, gummy bears, jello

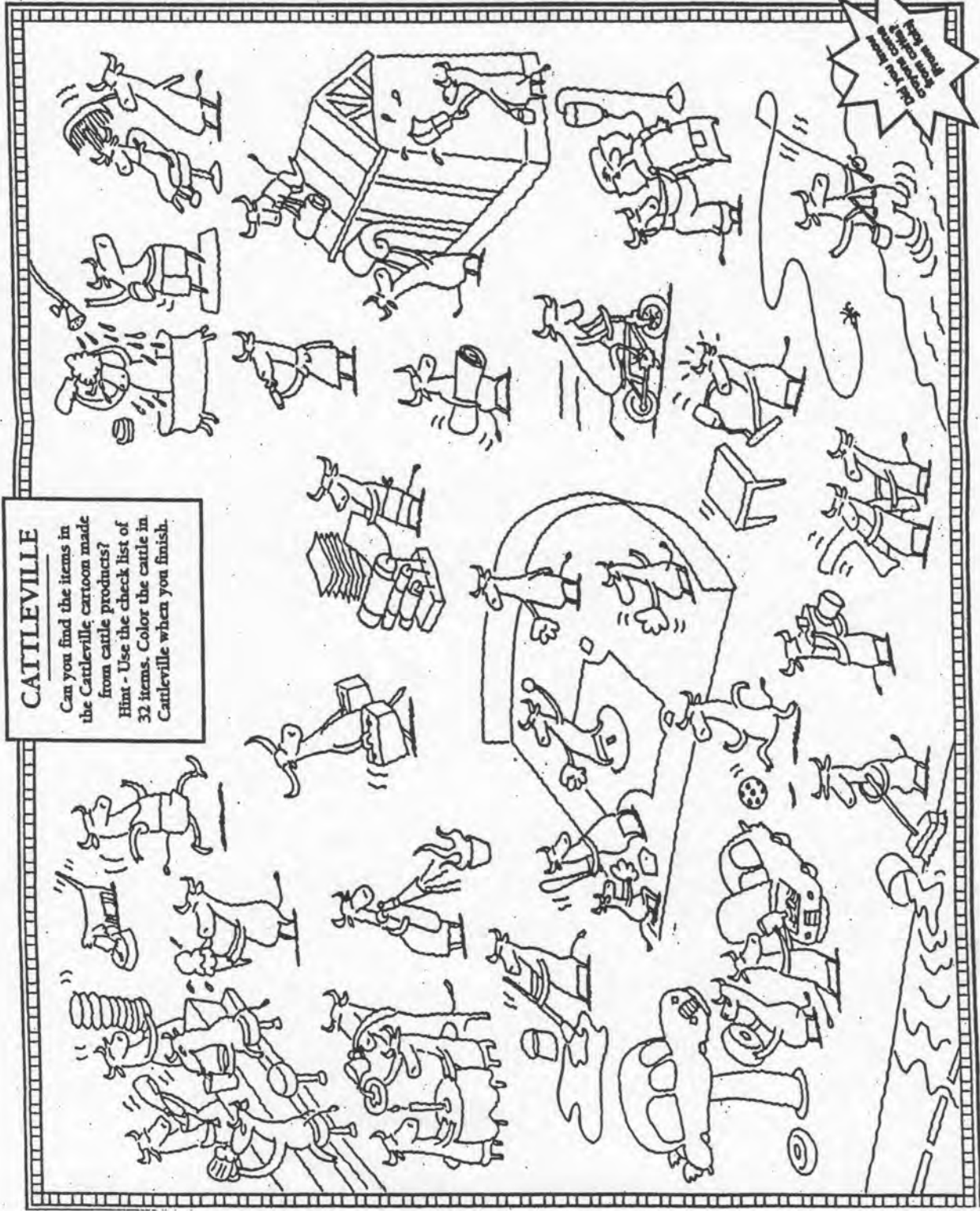
Procedure:

98% of every cow is used, with less than 1/2 for beef. Where does the rest of the cow go? Your students will truly say "WOW that COW!" when they learn all the other things that cattle help to produce!

- 1) Brainstorm a list of items that people get from farms. Prompt students to give a variety of products that come from animals and plants that are used for food and fiber. Ex. Eggs/vegetables/meat/clothing
- 2) Discuss where the different items come from - an animal or a plant. Ex. Eggs - chickens / milk - dairy cattle / vegetable A fruits - plants / meat - cattle, pigs, chickens / clothes - cotton plants and sheep
- 3) Define the terms:
 - a. Animal/Plant primary product: The main commodity that we raise an animal or plant to produce. Go back to your list of farm items and make the connection between the farm crop and the store item. Ex. Beef cattle-meat / Cotton-fiber A clothes / Almonds-nuts
 - b. Animal/ Plant by-product: The other products that are created from an animal or plant after the primary product has been produced. Ex. Beef cattle - pharmaceuticals & gelatin / Cotton - cotton seed oil / Almonds (hulls) - cattle feed
- 4) Time to WOW the students with WOW that COW!
 - a. Tell the students that they are going to all be saying "WOW the COW" by the time you finish telling them all the primary products and by-products of beef cattle.
 - b. Pass out the Cattleville worksheet and tell the students that you will be going on an "I Spy" picture hunt to learn about all the by-products of cattle.
 - c. You will say ... "WOW that COW! Can you believe cows give us paint brushes!" The students will then search the picture for the painting cow and color it. An overhead or poster may help some, especially with younger children.
 - d. Talk about what part might give us each by-product and how life would be different without it.
 - e. Continue for as many items as you have time for - try to do at least three from each of the body part categories (hide/hair, bones/horns/hooves/blood/gelatin, fats/fatty acids).
- 5) To end the lesson with a final BANG - you can do a cattle candy tasting. Gelatin is found in cattle horns, hooves, and bones. Bring in a sampling of these items and try them (see list in optional materials).

CATTLEVILLE

Can you find the items in the Cattleville cartoon made from cattle products?
Hint - Use the check list of 32 items. Color the cattle in Cattleville when you finish.



Keep unused
clippings for
future use

From Cattle

Check the items off as you go.

Hides and Hair

- ☐ Paint Brush
- ☐ Furniture Glue
- ☐ Wallpaper
- ☐ Building Insulation
- ☐ Leather Suitcase
- ☐ Leather Jacket
- ☐ Leather Chair or Stool
- ☐ Soccer Ball
- ☐ Baseball
- ☐ Baseball Glove (Mitt)

Bones, Horns, Hooves Blood and Gelatin

- ☐ China Dishes
- ☐ Ice Cream
- ☐ Milkshake
- ☐ Fire Extinguishing Foam
- ☐ Camera Light Filter
- ☐ Camera Film
- ☐ Dog Food
- ☐ Printing Press
- ☐ Comb

Fats/Fatty Acids

- ☐ Asphalt
- ☐ Candle
- ☐ Lipstick
- ☐ Deodorant
- ☐ Shampoo
- ☐ Bar Soap
- ☐ Floor Wax
- ☐ Tires
- ☐ Hydraulic Brake Fluid
- ☐ Rubber Fishing Waders
- ☐ Running Shoes

From Pancreas

- ☐ Medicine



WOW that COW Center / Small Group Activities

(15 minutes/center - 1 hour or so total)

****For each center activity it would be helpful to display a chart of the by-products and place them into categories showing what part of the cow they come from (see attached list).**

1) WOW that COW Collage

Materials Needed:

Optional Materials: 3 foot Cow Shape (for whole class)

1 Cow Outline Page / Student

Scissors & Glue

Magazines and Grocery Store Ads

a. Individual-

- i. Hand out a Cow Outline page to each student.
- ii. Use magazines and store ads to find the many cattle products and by-products.
- iii. Glue the various pictures to the cow cut-out. Try to cover the entire cow with a picture collage. Students could also draw pictures for items that can't be found.

b. Whole Class -

- i. Make a large cow shape (3 foot)
- ii. Use magazines and store ads to find the many cattle products and by-products
- iii. Glue the various pictures to the cow shape. Try to cover the entire cow with a picture collage.

2) MOO-mory (Memory) or GO MOO (Go Fish)

Materials Needed: Card Sets (1 set for each group)

a. Have students play in groups of 2-4 students.

b. MOO-mory

- i. Put all cards face down.
- ii. Each child picks two cards to try to find a match (by-product picture and word)
- iii. If they find a match they keep the two cards, if not they turn both cards back over.
- iv. You can also have them say what part of the cow the by-product comes from.

c. Go Moo

- i. Deal five cards to each player.
- ii. Each player takes a turn asking another player if they have a specific by-product.
- iii. If the other player has it they must give it to the "asker", if they do not have it they say "go moo".
- iv. Continue playing either game until all pairs have been found. Student with the most pairs wins!
- v. Variation: Ask for an item by saying "Do you have a by-product that comes from the hide and hair?"

3) MY COW Bingo

Materials Needed:

1 Photo Page/student

Scissors & Glue

Markers (ex. beans)

1 MY COW Bingo card/student

Set of Bingo Calling Cards

Optional Materials:

Mini Marshmallows for Markers

- a. Cut out the by-product pictures on the photo page.
- b. Glue into the correct bingo column (hide/hair, horns/hooves, fats) and draw a cow in the center "free" space. **This will ensure that the bingo cards are different. They will have extra pictures that they can throw away.
- c. Play bingo in a small group (one person is the "caller" and draws out a card and calls out the item)
- d. Players place a marker on each space until they get bingo, but in this case they must call out "MOOOOOO" to show they have won the game.
- e. To add a little fun to the game, have the students use mini marshmallows for markers. At the end of the game they can eat the marshmallows.

4) WOW that COW Classroom Scavenger Hunt

Materials Needed:

1 Scavenger Hunt Page "There's a Cow in My Classroom"/student

Pencils

By-product items

- a. Students scan the classroom from their center area or walk around the room with a clipboard and find cattle by-products. You may also want to move items into areas where they will be seen. You may also want to "plant" some items that aren't typically in a classroom.
- b. Students will make a picture or word list on the scavenger hunt page of items they find.

Extension Project

Materials Needed:

Paper & Pencils

Optional Materials:

Highlighters

- 1) Have students write a diary entry of a typical day in their life. Make sure they put in a lot of details, ex. What they eat, how they get ready, what they wear, etc.
- 2) After the story is written they will have a partner go through the story and highlight or circle every item that they used that is a product or by-product of a cow.
- 3) For a math twist, have students make a timeline with clocks to detail what time each event happens at.

Homework Assignment

Materials Needed:

"There's a Cow in My..." Worksheet/student

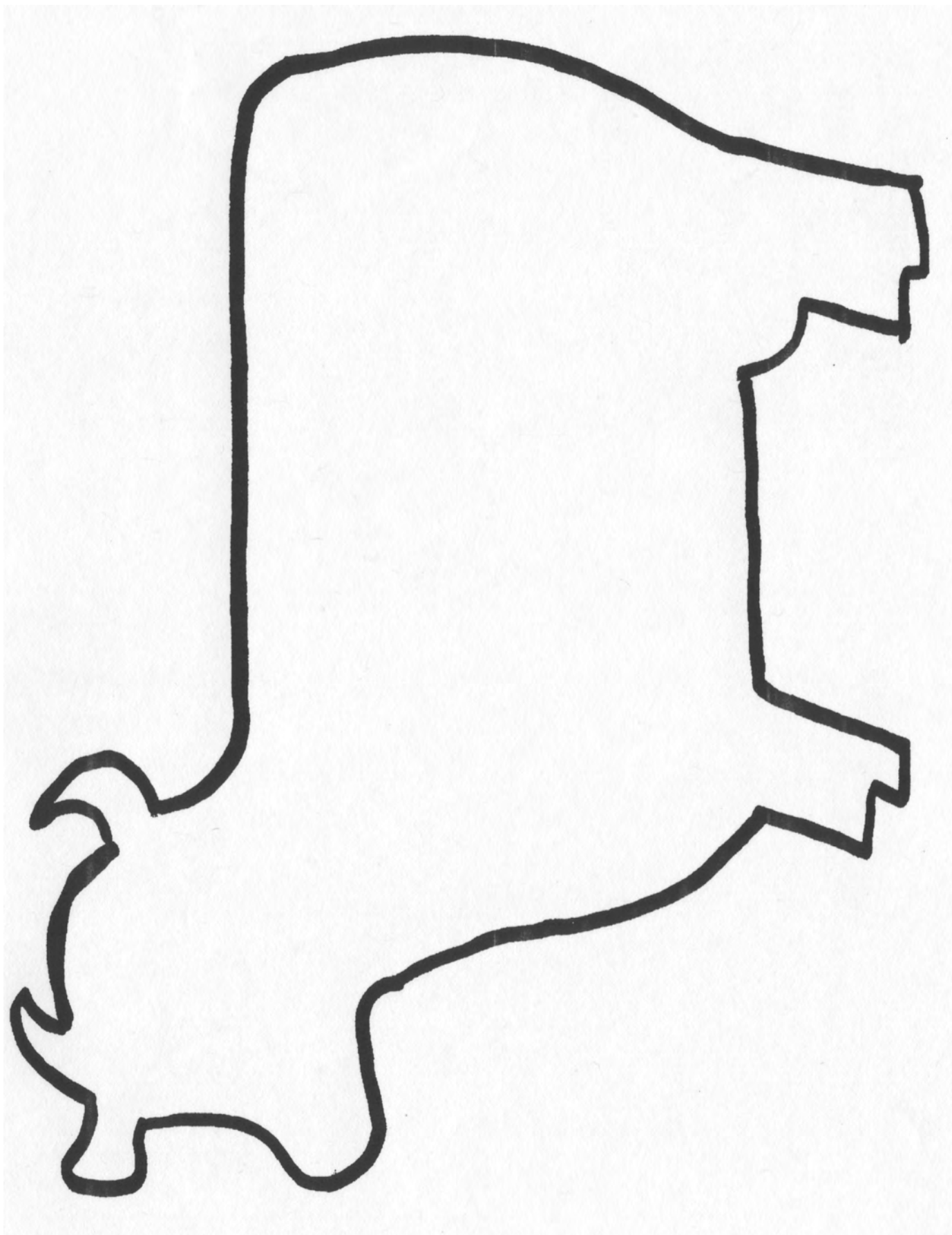
Cattleville Worksheet or Cattle By-Product List for reference

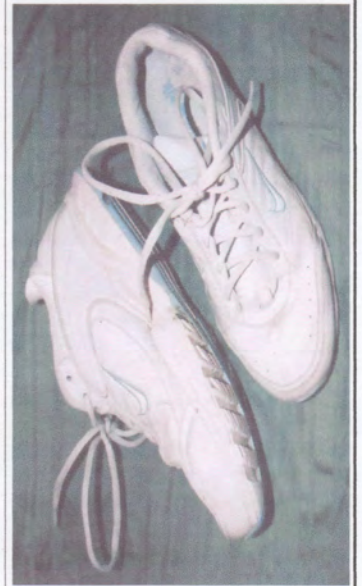
- 1) Students will search their homes for items that come from cattle.
- 2) As they find each item they will record it on their worksheet.

Cattle By-Products

<u>Hide & Hair</u>	<u>Fats & Fatty Acids</u>	<u>Horns, Bones, Hooves & Blood</u>	<u>Organs & Glands</u>
Leather Case	Asphalt	China Dishes	Racket Strings
Leather Belt	Candles	Dog Food	Allergy Medicine
Soccer Ball	Crayons	Printing Press	Vaccines
Baseball	Toothpaste	Comb	Prescription Meds
Baseball Mitt	Lipstick	Fertilizer	Vitamins
Paint Brush	Deodorant	Dog Bones	
Glue	Shampoo	Fire Exting. Foam	
Wallpaper	Bar Soap	Gelatin	
Building Insulation	Laundry Soap	Ice Cream	
Emery Boards	Floor Wax	Camera Film	
Sandpaper	Rubber Boots	Jello	
Plywood & Drywall	Running Shoes	Gummy Candy	
Paper Boxes	Tires	Jelly Beans	
Linoleum	Brake Fluid	Marshmallows	
	Car Polish & Wax	Chewing Gum	

Wow that Cow Collage





Leather Suitcase	Soccer Ball	Paint Brush
Glue	Fire Extinguisher Foam	Camera Film
Jello	Marshmallows	Rubber Boots
Toothpaste	Crayons	Running Shoes

Bingo Card

MY C	O	W
Hide & Hair	Fats & Fatty Acids	Horns, Bones, Hooves, Blood
	MOO!	

Bingo Pictures

<p>MY COW</p> <p>Bingo Cards</p> <p>5 Row - #2</p>	 <p>Hide & Hair</p>	 <p>Hide & Hair</p>	 <p>Hide & Hair</p>
 <p>Hide & Hair</p>	 <p>Hide & Hair</p>	 <p>Fats & Fatty Acids</p>	 <p>Fats & Fatty Acids</p>
 <p>Fats & Fatty Acids</p>	 <p>Fats & Fatty Acids</p>	 <p>Fats & Fatty Acids</p>	 <p>Fats & Fatty Acids</p>
 <p>Horns, Bones, Hooves, Blood</p>	 <p>Horns, Bones, Hooves, Blood</p>	 <p>Horns, Bones, Hooves, Blood</p>	 <p>Horns, Bones, Hooves, Blood</p>

Name _____

Make a list of all the beef by-products you can find in your classroom!

There's a Cow in My Classroom



NAME _____

SCAVENGER HUNT

THERE'S A COW IN MY...

CLOSET!

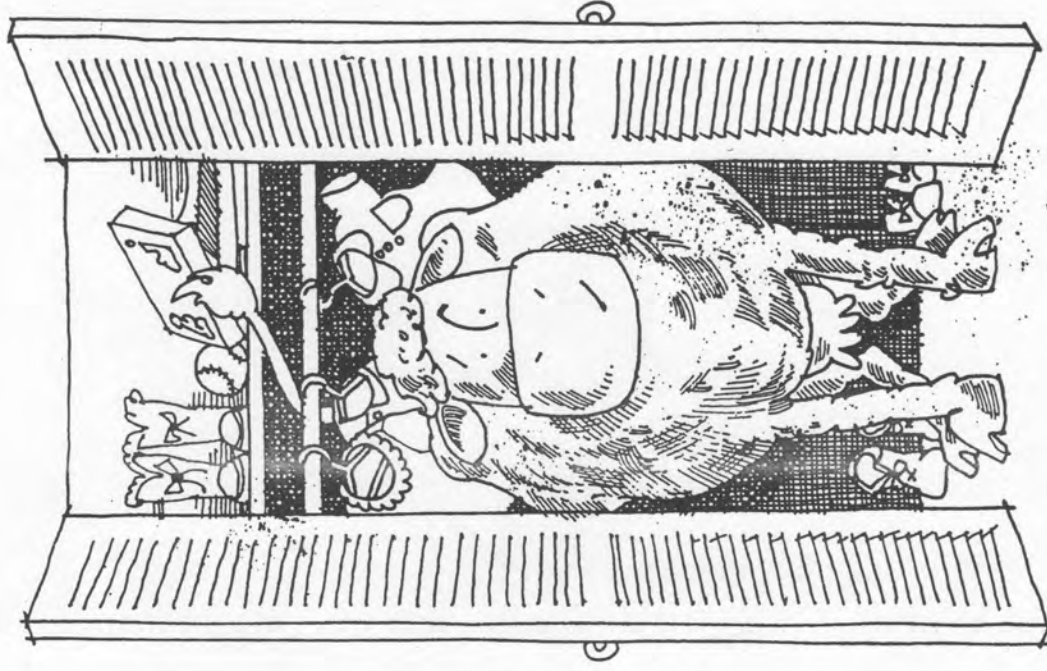
REFRIGERATOR!

BATHROOM!

LIVING ROOM!

KITCHEN!

DRAWER!



DIRECTIONS: Because the farmer is a good caretaker of animals, you will find many products provided by animals in your home. See if you can find a cow in the following places.