

MORE THAN MEAT

BEEF PRODUCTS AND BYPRODUCTS LESSON

Learning Target: Recognize everyday items that contain beef products or by-products.

Engagement Strategy:

At the start of the lesson, display on a tray or table a collection of items that contain beef cattle by-products like the ones listed below OR give students a copy of the "More Than Meat" handout that has photos of by-product items.

Allow students **only one minute** to study the collection or image.

When one minute is up, cover or take away the collection and give students the "More Than Meat" student page.

Students should try to recall as many items as they can remember and write them down in the spaces provided. You can have them do this individually or as a small group.

Then have the class come together. As students answer or describe them, list each item on the board

- | | | |
|---------------------|-------------------|---------------|
| ○ glue | ○ chewing gum | ○ deodorant |
| ○ soap | ○ tea cup (china) | ○ gummy bears |
| ○ fire extinguisher | ○ tires | ○ soccer ball |
| ○ marshmallows | ○ crayons | ○ ice cream |
| ○ sandpaper | ○ Jello/gelatin | ○ toothpaste |
| ○ jelly beans | ○ tennis racquet | ○ hair comb |
| ○ lipstick | ○ strings | ○ dog food |

Learning Activity:

Ask the class "What do all these things have in common?". Tell your students all these things all come from beef cattle. Then compare the terms "product" and a "by-product".

- **product:** the principle or primary purpose of manufacturing or producing something
- **by-product:** a secondary product created during the production of something else

So for beef cattle, the **primary product** is meat and a by-product would be gelatin used in making gummy candies and Jello. In other words, we do not raise beef cattle to make gelatin but it is a useful by-product. An added benefit is that we **don't waste non-meat parts of cattle** during processing.

Give students the handouts, scissors, and glue. Students will cut out the pictures and words, then **glue them under the headings** for "Products" and "By-Products" on the outline of the beef animal.

- **Products:** kabobs, bratwurst, steak, burgers, ribs, roast
- **By-Products:** baseball mitt, cosmetics, plastic, shoes, leather jacket, medicine, softballs, knife handles, soap

Culminating Activity:

Show the picture of a Holstein cow compared to the Charolais cattle. Ask students to describe the differences they see in these two types of cow.

Discuss that **different breeds (or types) of cows are raised for different products**. Holsteins (the black and white cow in the top photo) are raised to produce milk so they are known as dairy cattle. Charolais (pronounced "shar-lay") are raised for meat. While we do still get many similar by-products from dairy cattle, the primary product is different.

TEACHER'S GUIDE

MORE THAN MEAT

BEEF PRODUCTS



VS



MORE THAN MEAT

BY-PRODUCTS



MORE THAN MEAT

BY-PRODUCTS

1. _____ 11. _____

2. _____ 12. _____

3. _____ 13. _____

4. _____ 14. _____

5. _____ 15. _____

6. _____ 16. _____

7. _____ 17. _____

8. _____ 18. _____

9. _____ 19. _____

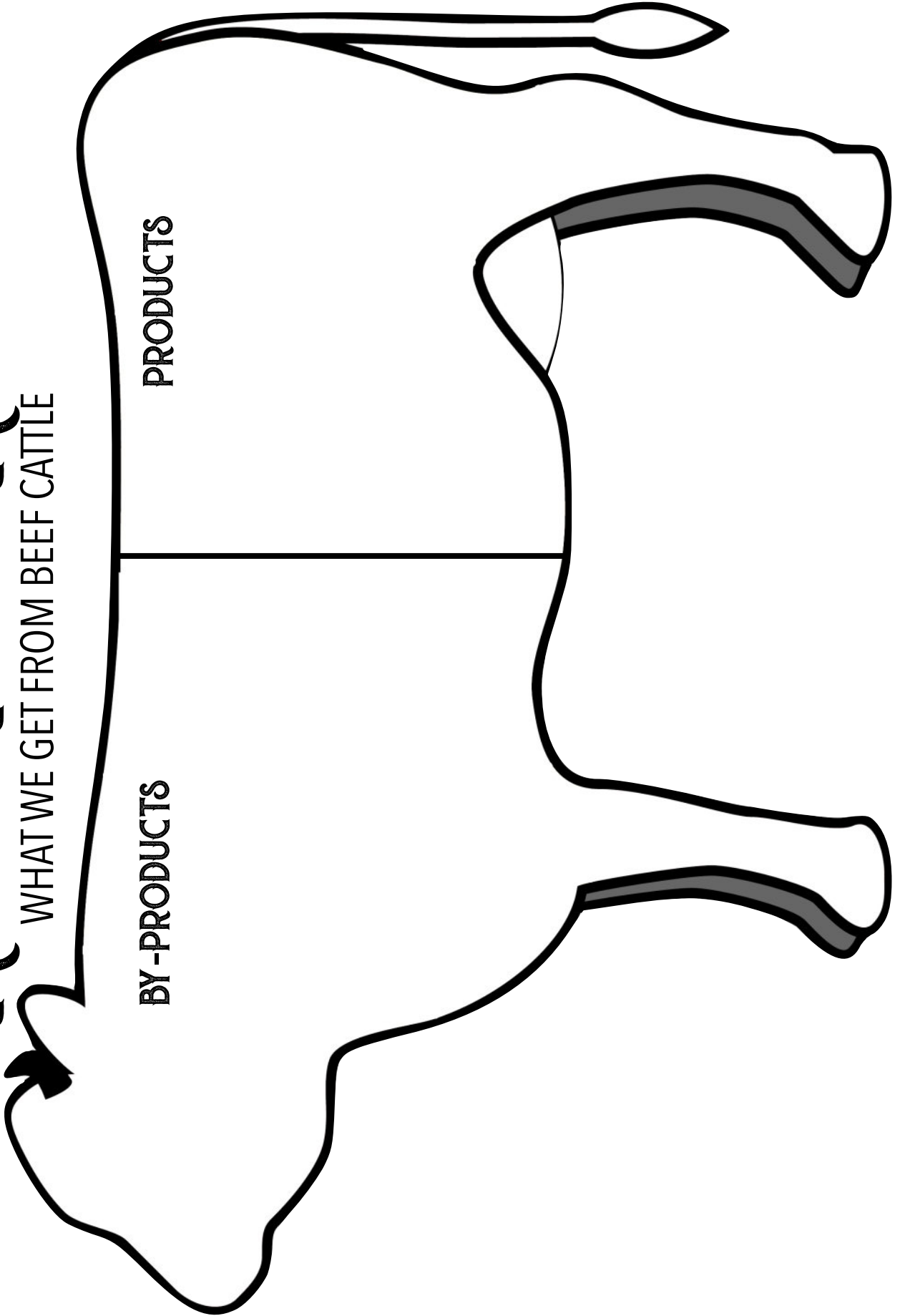
10. _____ 20. _____

MORE THAN MEAT

WHAT WE GET FROM BEEF CATTLE

BY-PRODUCTS

PRODUCTS



MORE THAN MEAT

PRODUCTS AND BY-PRODUCTS



baseball mitt



bratwurst



knife handles



cosmetics



leather jacket



burgers



plastic



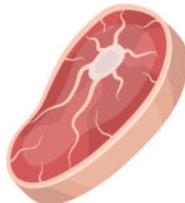
medicine



ribs



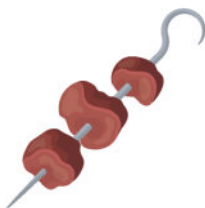
shoes



steak



soap



kabobs



softballs



roast