Beef Worksheet

Objective:

Students will be able to use mathematical skills to understand the process that livestock producers use to have animals at their desired weight before they are sold.

Indiana Academic Standards:

Mathematics: Grade 7

7.C.8 - Solve real-world problems with rational numbers by using one or two operations.

National Agricultural Literacy Outcomes

Plants and Animals for Food, Fiber & Energy Outcomes

T2.6-8.b - Explain the role of ethics in the production and management of food, fiber and energy sources.

Materials:

- Writing Utensil

- Student Worksheet

BEEF

Instructions: Solve the mathematical problems below.

Morgan is a 8-year 4-H member and enjoys showing beef cattle. She purchased a steer, a male cattle that cannot reproduce, in October. Morgan has set several different goals for her 4-H beef project. She is determined to show at the Indiana State Fair and will need to establish a feeding schedule to ensure her steer is at proper condition for the show.

1. Morgan loaded her steer on the trailer today for a veterinary check and to acquire a current weight of her steer. Today her steer weighs 1,200 pounds and the average daily gain is two pounds. If the state fair is in 60 days, what should her steer weigh at the end of the 60-day period?

    _____

    _____

2. A steer should eat 2% of its body weight per day in order to gain weight correctly. If Morgan's steer weighs 1,200 pounds today, how many pounds of feed should Morgan be feeding her steer each day to make sure he gets the correct percent feeding of his body weight?

    _____

    _____

1. 1,320 pounds
2. 24 pounds of feed per day

Once the students have this solved, they get the puzzle piece for beef.

Background Information:

- In Indiana, there is a lot of pastureland available to raise beef cattle. Beef cattle need grass-land to range on and turn forage into energy.

- Washington County has the largest number of beef cattle in Indiana.

- Indiana is home to more than 800,000 head of cattle.

- In 2018 the beef exports accounted for a total of $7.27 billion.

- Exports count for around 13% of beef production in the United States.

- Texas produces the most beef cattle in the United States.

Careers:

Geneticist, ranch manager, meat packer and embryologist