



Beef Worksheet

Objective(s):

Students will be able to apply mathematical skills in addition and multiplication to understand the concept of perimeter and area.

Indiana Academic Standards:

Mathematics: Grade 3

Measurement

3.M.6 – Multiply side lengths to find areas of rectangles with whole number side lengths to solve real-world problems and other mathematical problems, and represent whole-number products as rectangular areas in a mathematical reasoning.

3.M.7 – Find perimeters of polygons given the side lengths or given an unknown side length.

National Agricultural Literacy Outcomes

Plants and Animals for Food, Fiber & Energy Outcomes

T2.3-5d. Provide examples of specific ways farmers/ranchers meet the needs of animals.

Materials:

- Writing Utensil
- Student Worksheet



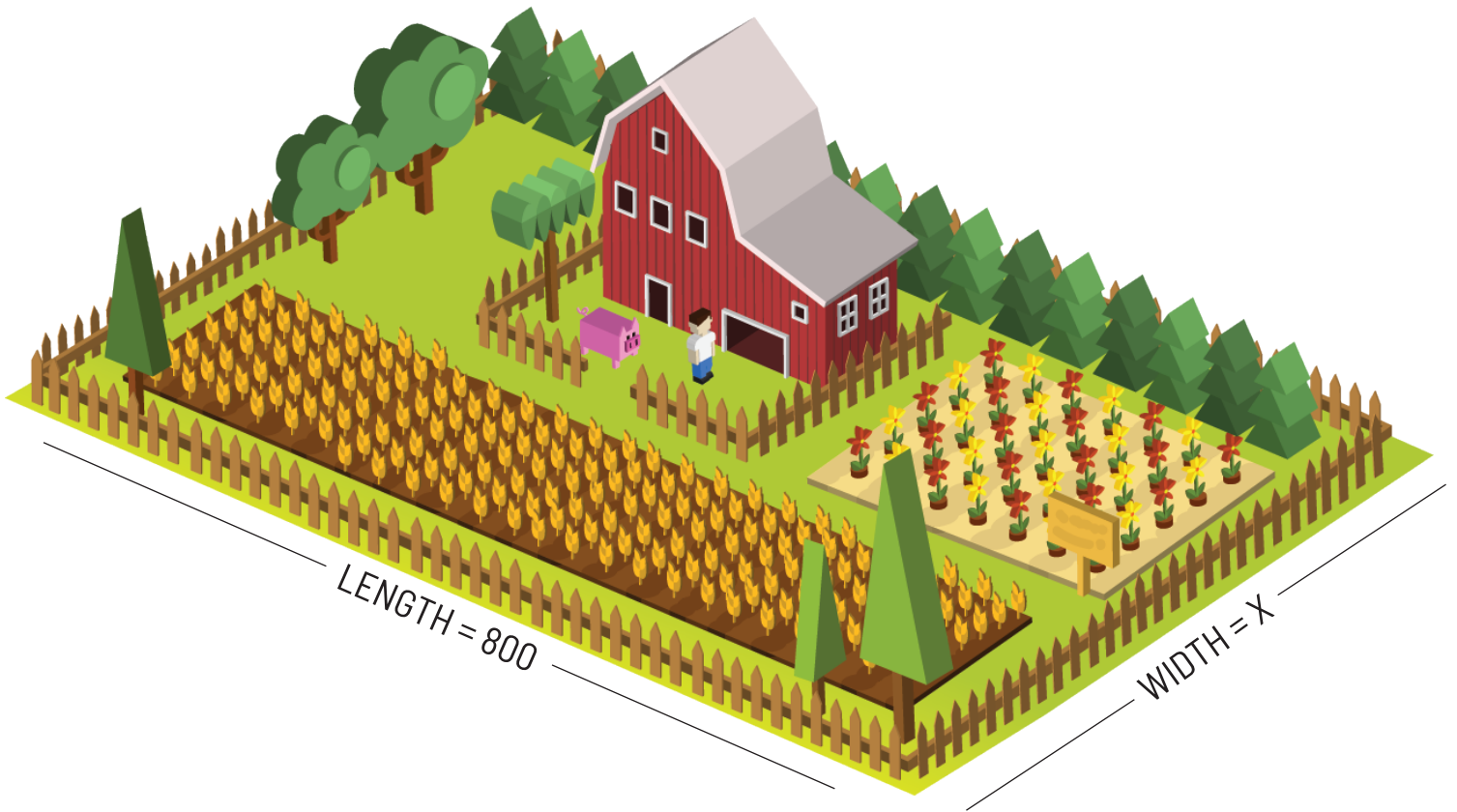
Name: _____



Farmer Randy has a farm of grass-fed beef cattle. Randy has been growing his farm recently and wants to know how much fence he needs for his new pasture. He needs enough fence to go around the entire rectangle of pasture. The pasture must have 480,000 square feet to have enough grass for the herd. Randy knows that he wants his fence to be 800 feet long.

What should the width of his fence be? _____

What would the perimeter of his rectangular fence be? _____





Teacher Answer Key

The length of the fence is 800 feet long, so the width would be 600 feet. This makes the perimeter of fence answer: 2,800 feet.

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

Background Information:

- In southern Indiana, there is a lot of pasture land to raise beef cattle. Beef cattle need to have grass land to range on and they turn forage into energy.
- Washington County has the most head of beef cattle in Indiana.
- Indiana is home to more than 800,000 head of cattle.
- Cattle can eat up to 40 pounds of feed per day.
- More than 100 medicines that people use come from cattle.