

# Beef Life Cycle Grid

## Background Knowledge:

Beef cattle are a renewable natural resource that are useful to humans, but to the beef farmer, their cattle are also a precious resource as they rely upon them for their livelihood. They take great care to ensure they are raising healthy cattle. They are committed to providing the best care for their animals at all stages of their life cycle. It takes about 16-18 months for beef cattle to reach market weight, where they weigh enough to be sold for their meat. While some beef operations in Pennsylvania handle all parts of beef production during the life cycle of the beef cattle, it is very common for a beef animal to have multiple farmers caring for it over the course of its life. Beef production typically involves three different types of beef operations: Cow-Calf, Stocker/Backgrounder, and Feedlot.

## Procedure:

1. Give each student a Beef Cattle Images sheet. Have students cut apart the images and place them in the order they believe they should be from birth forward.
2. Review the order of the pictures with the students and discuss that all living things have a life cycle that includes a series of changes in the life of the organism.
3. Explain that in beef production, cattle are typically in one of three types of operations during their life cycle:

Cow/Calf	beginning of beef production where female cattle are raised, bred and cared for while they wait to have their calf.
Stocker/Backgrounder	focus on caring for cattle and making sure they are gaining weight from a calf until ready for final stage of production
Feedlot	the final step in raising beef that focuses on growing cattle to market weight, where cattle are ready to be harvested for meat

4. Divide class into groups of 4-5 students. Distribute the Beef Life Cycle cards and grids to each group.
5. Instruct the students to use the fact side of the cards. As they read the facts, they should place them on the grid in the row for the appropriate beef cattle operation/lifecycle stage under the correct fact column.
6. After the students have arranged all of their cards, have them use Produced with Pride in Pennsylvania: Beef book to check that the cards have been properly placed on the grid.
7. Once the students are satisfied with the placement of their cards, have them tape the cards together exactly as they are on the grid. Be careful not to tape them to the grid.
8. When all pieces are taped together, have the students turn the cards over to reveal a diagram illustrating the life cycle of beef with additional facts and information on the steps involved in beef production from farm to plate.

## Extension:

Use information from grid and book to create a timeline for the life of a beef animal from birth to harvest that identifies the major events in the life cycle and in which type of beef operation each phase would occur.

**Objectives:** Students will

- Identify the three different types of beef operations.
- Recognize how needs of cattle are met in each phase of their lifecycle.

**Materials:**

- Beef Cattle Images sheet (1/2 sheet/student)
- Produced with Pride in Pennsylvania: Beef book
- Beef Life Cycle Cards, cut apart (1 set/team)
- Beef Life Cycle Grid (1/team)
- Tape

**Standards:** This lesson assists in meeting the following PA standards:

*3.1.A1; 3.1.A2; 3.1.A3; 3.1.B1; 4.1.A; 4.1.C; 4.1.C; 4.3.A; 4.3.B; 4.4.A; 4.4.B; 4.4.C; 4.4.D; 4.5.A*