TEACHER'S GUIDE

Dairy Curriculum

UNIT OVERVIEW

Day 1: Anatomy and Breeds —

Learning Target: Identify popular breeds and parts of dairy cattle using correct terminology.

Student Outcomes: Students will be able to identify characteristics of dairy cattle and popular breeds, use correct anatomical terms for common parts, and apply proper terminology.

Learning Activity Materials:

- Teacher Lesson Guide
- "Are You My Mother?": teacher information for common terms
- o "Meet the Milk Makers": teacher Information for anatomy and breeds, student handout
- "Milk or Meat?: student handout
- o no other supplies needed

Day 2: Lactation and Milk Production -

Learning Target: Describe parts of a cow's udder with correct terminology.

Student Outcomes: Students will be able to use correct terms to describe parts of a cow's udder and recognize the local impact of the dairy industry.

Learning Activity Materials Needed:

- Teacher Lesson Guide
- o "Dairy Data": teacher answer key, student handout
- "Where Milk Comes From": teacher information, student puzzle page
- o "Decoding Dairy": student activity pages
- scissors and envelopes
- empty dairy product cartons or containers
- o access to the internet

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UNIT OVERVIEW

Day 3: Dairy Products

Learning Target: Identify food products that are made from dairy or milk components.

Student Outcomes: Students will be able to list types of dairy products and describe how they are made.

Learning Activity Materials Needed:

- Teacher Lesson Guide
- o "Dairy Where?": teacher answer guide
- o "I Spy Dairy Products": teacher answer key, student handout
- "Shake It Up": teacher guide
- heavy cream
- salt
- o containers with a lids (jars or plastic bottles)
- o marbles (optional)
- strainer
- bowl scraper or spoon
- o plastic wrap or parchment paper
- plastic knives (for spreading butter)
- bread or crackers
- o jelly (optional)

Day 4: Ruminants and Dairy Cattle Nutrition

Learning Target: Determine components of a typical dairy cattle feed ration and identify parts of the ruminant digestive system.

Student Outcomes: Students will be able to describe components of dairy cattle rations, identify parts of the ruminant digestive system, and describe the purpose of each.

Learning Activity Materials Needed:

- Teacher Lesson Guide
- "Would You Each That?": teacher answer guide, student handout
- o "The Cow's Superpower": teacher answer guide
- "Roll-a-Ruminant": student handout
- dice
- coloring supplies (crayons or colored pencils)

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Dairy Curriculum

UNIT OVERVIEW

Day 5: Raising Dairy Cattle -

Learning Target: Describe how producers raise dairy cattle and the day-to-day activities involved on the farm.

Student Outcomes: Students will be able to discuss the various aspects of a working dairy from feeding and milking to calf care and record keeping.

Learning Activity Materials Needed:

- Teacher Lesson Guide
- Video: "A Day on the Dairy Farm"
- o "Dairy Diary": teacher guide, student handouts
- o "Part of the Herd": student handout
- scissors and a stapler
- black markers or stamp pad
- coloring supplies (crayons or colored pencils)