

Middle School Agriscience Topics

Animal Science

- Breed Identification:
 - Dairy
 - Beef
 - Swine
 - Horse
 - Chicken
 - Goat
 - Sheep
- Beef Cattle Anatomy:
 - Tailhead
 - Poll
 - Loin
 - Brisket
 - Rump
 - Rear Flank
 - Ribs
- General Knowledge:
 - Digestive Systems
 - Ruminants
 - Monogastric
 - Hind Gut Fermenters
 - Nutrition
 - Forages
 - Concentrates
- Gestation Periods
- Biosecurity
- Animal Terminology

Plant Science

- Identification:
 - Plant Anatomy
 - Internodes
 - Leaves
 - Nodes
 - Petals
 - Pistil
 - Receptacle
 - Root Hairs
 - Sepal
 - Stamen
 - Terminal Bud

- Common Crops and Flowers:
 - African Violet
 - Alfalfa
 - Barley
 - Begonia
 - Field Corn
 - Gladiolus
 - Oats
 - Petunia
 - Red clover
 - Wheat
 - Zinnia
- General Knowledge:
 - Basic Horticultural Plant Care:
 - Fertilizing
 - Basic Requirements for Life (Air, Water, Sunlight, Temperature)
 - Photosynthesis
 - Pest management
 - Soil Medias
- Field Scenarios:
 - Pest Damage
 - Weather Damage
 - Fertilizer Damage

Agricultural Mechanics

- Identification:
 - Machines
 - Table Saw
 - Band Saw
 - Sander
 - Router
 - Plainer
 - Chop Saw
 - Drill Press
- Welding Types
 - SMAW
 - MIG
 - TIG

- General Knowledge:
 - Mechanics Lab Safety
 - Personal Protection Equipment
 - Shop Safety Color Coding System
 - Shop Facility Safety

Food Science

- Identification:
 - Primal Pig Cuts
 - Ham
 - Loin
 - Bacon
 - Ribs
 - Spareribs
 - Picnic
- General Knowledge:
 - Food Safety
 - Temperature Ranges for Cooking, Holding, and Cooling
 - Food Nutritional Comparisons (i.e., banana vs. potato)
 - Preparation
- Vocabulary
 - Preservatives
 - GMOs
 - Malnutrition
 - Pathogen
 - Perishable vs. Non Perishable

FFA Knowledge

- Officer Stations
- Parts of the FFA Emblem
- Degree Pins/Charms
- Official Dress
- SAE Categories
- Purpose of FFA
- FFA Mission
- Membership Requirements
- 3 Components of Agricultural Education (3-Circle Model)
- CDE areas
- LDE areas
- FFA Degrees
- Official Colors

- Important Dates in National FFA History
 - Smith-Hughes Act
 - FFA Established
 - FFA Creed Adopted
 - FFA Jacket Adopted
 - FFA Opened to Female Students
 - Name Change to National FFA Organization
 - National FFA Center in Indianapolis Opens
- Current WI and National FFA Officer Team