

Agriculture...Where Does it Fit in Middle School?



6th Grade – Science

- ✓ *Scientific Investigation, Reasoning, and Logic* – conduct and investigation in which data is collected, organized, recorded, and communicated
- ✓ *Force, Motion, and Energy* – compare and contrast renewable and nonrenewable energy sources; research agriculture's role in alternative fuels
- ✓ *Matter* – understand the importance of water for agriculture, power generation, and public health
- ✓ *Living Systems* – describe the effects of humans on watersheds; locate and map Virginia's regional watersheds; research environmental hazards facing watersheds
- ✓ *Resources* – research and understand conservation policies regarding renewable and nonrenewable resources; conduct experiments dealing with land preservation; explore new uses for renewable resources

Life Science

- ✓ draw and label plant and animal cells
- ✓ describe the life needs of plants and animals
- ✓ understand key concepts involving ecosystems and organisms, including phototropism, hibernation, and dormancy
- ✓ describe the process of food production and harvest and its effect on the environment
- ✓ discuss the role of DNA as it relates to the field of biotechnology
- ✓ perform a DNA extraction on a piece of fruit
- ✓ investigate environmental issues such as water supply and energy production
- ✓ classify animals using distinguishing characteristics of the species
- ✓ compare and contrast land and marine ecosystems

Civics and Economics

- ✓ apply the concepts of scarcity, resources, choice, opportunity cost, price, incentives, supply and demand, production, and consumption
- ✓ explain the creation of public goods and services
- ✓ define and give practical examples of free markets, private property, profit, and competition
- ✓ draw a diagram to explain how producers, consumers, and markets interact
- ✓ create a chart to display Virginia food imports and exports
- ✓ examine the role of government in consumer rights and safety
- ✓ interpret laws regarding protection of property rights
- ✓ discover careers in science, technology, and agriculture

Language Arts

- ✓ use figurative language to describe Virginia's geography and natural resources
- ✓ write a descriptive essay about Virginia's watersheds
- ✓ compose a persuasive essay arguing for or against the production of alternative energy

Mathematics

- ✓ *Measurement* - estimate and then determine the perimeter and area of a garden using standard and nonstandard units of measure
- ✓ *Computation and Estimation* – solve practical and consumer application problems using real-world examples

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