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## Animal Agriculture

1. **Food, Fiber, and More from Animals**
   Learn about the varied uses of animal byproducts or coproducts, focusing on agricultural animals produced in Maryland.

2. **Wild and Wooly**
   Learn about sheep and goats and the various products derived from them.

3. **Moo Who?**
   Differentiate between beef and dairy cattle (*Bos taurus*) and observe how each species evolved over time.

4. **Animal Digestion**
   Compare and contrast the digestive systems of ruminant (4 compartment stomach) and monogastric (single stomach) animals, observing how groups share differences and similarities which can be used to infer the degree of relatedness among organisms.

5. **Burgers, Chops and Steaks: Looking at Beef, Pork and Lamb**
   Learn about meat consumed by humans and the role meat plays as an agricultural commodity in human diets as well as Maryland’s economy.

6. **Milk in Motion: A Dynamic Dairy Experiment**
   Learn about the dairy industry and dairy products, as well as learn about dynamic properties found in milk.

7. **Poultry: Feed Basics for a Growing Bird**
   Learn about the effects of nutrition on broiler chicken growth and processing and simulate the mixing of poultry feed using animal feed ratios.

8. **Horses and Evolution**
   Understand how horses evolved over time and compare and contrast how different types of horses are used today as well as learn horse related terminology.
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PLANT AGRICULTURE

9. It’s Just Dirt
Learn about soil a natural resource, what its components are, how it is used and if it is renewable.

10. Send in the Sun: A Look at Photosynthesis
Observe the results of photosynthesis and lack of photosynthesis over an extended period of time.

11. Grains: The Whole Story
Understand the important food and non-food uses of the major grains grown in Maryland.

12. The Amazing Soybean
Explain the role of soybeans and other legumes in making nitrogen available in a form that can be used by plants, animals, and humans and understand why plants such as grasses benefit from legumes for growth.

Simulate a farmer’s market to learn about the benefits of locally grown food.

AGRICULTURE AND THE ENVIRONMENT

14. Food for Thought: Agriculture in the Chesapeake Bay Watershed
Develop an understanding of size and importance of the Chesapeake Bay watershed and recognize Maryland Agriculture as integral to human life in the watershed.

15. Do You Get My (Non)Point? Modeling Pollution in a Watershed
Develop an understanding of ways in which the activities of humans can cause nonpoint pollution within a watershed.

16. Conservation Choices: How Farmers and Developers Protect the Bay
Understand how Maryland farmers and developers can use conservation techniques to reduce environmental damage.

17. Who Lives Here? Species of the Bay Region and Watershed
Identify numerous species, including birds, and wildlife living in the bay and its tributaries and learn how these species positively or negatively affect our bay.
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Agricultural Technology

18. Persistent Pests
   Simulate the effects of pesticides on an insect population and observe how the population changes over time.

19. Something Fishy: Aquaculture in Maryland
   Understand that harvest rates of aquatic organisms by humans that are higher than reproductive rates can lead to a population’s decline and realize the importance of aquaculture’s role in providing a sustainable seafood supply for an increasing human population in the Chesapeake Bay watershed.

20. What’s in Your Genes?
   Learn how to predict plant and animal offspring traits or characteristics using genetics.

21. Food Safety is for Everyone
   Understand causes of foodborne illnesses and how to prevent them as well as simulate the growth of bacterial colonies and learn proper hand washing techniques.

22. Down and Dirty with Biosecurity
   Research biosecurity strategies and develop a plan to promote biosecurity at a hypothetical livestock production facility.