Date: June 16, 2004

Subject: Technology Education

Grade Level: 8th

Time Required: One, 45 minute class period

Lesson Title: Agriculture Jeopardy

Prerequisite Skills/Concepts: None needed

Key Idea/Skill(s): Test the agricultural knowledge of the students.

Safety Accommodations: Make sure any extension cords that are on the floor are taped down, to prevent tripping.

Instructional Goals(s)/Outcomes: Conduct a pre-assessment to determine what students know about agriculture in Kansas.

Kansas Education Standards: Kansas does not have its own Technology Education standards; therefore I will be using International Technology Education Association (ITEA), standards.

Standards: #1 The Characteristics and Scope of Technology

#3 The Relationships Among Technologies and the Connections Between Technology and Other Fields.

#4 The Cultural, Social, Economic, and Political Effects of Technology

#5 The Effects of Technology on the Environment

#7 The Influence of Technology on History

Benchmark Topics:

#1 Usefulness of technology, Development of technology, Human creativity and motivation, Product demand.

#3 Interaction of systems, Interrelation of technological environments, Knowledge from other fields of study and technology.

#4 Attitudes toward development and use, Impacts and consequences, Ethical issues, Influences on economy, politics, and culture.

#5 Management of waste, Technologies repair damage, Environmental vs. economic concerns.

#7 Processes of inventions and innovations, Specialization of labor, Evolution of techniques, measurement, and resources, Technological and scientific knowledge.

Lesson Objectives: Students will identify their agricultural knowledge by playing Agricultural Jeopardy,

taken from the popular game show. Students will also have fun.

Materials Needed: Game timer, quiz buzzers (or similar for the contestants), dry wipe board, dry wipe

markers, paper towels, extension cords for buzzers and small pieces of paper for Final

Jeopardy.

Agricultural Jeopardy

Objective

At the end of the game, the team with the most points will be declared the winner.

How to Play

Each team will have a team member go to the front of the room to a pre-assigned buzzer. The game host will determine which team picks the first category. All contestants are eligible to answer the question. To answer a question, the contestant must press his/her buzzer before anyone else. The game system will determine who buzzed in first, second and so on. If the first contestant to buzz in doesn't answer correctly, the system will show who buzzed in second and they may answer. This process continues until the correct answer is given, no correct answer is given or until the instructor calls time for that question. If no one answers correctly, the instructor should give the correct answer (offering some explanation, if warranted). The team who answered correctly gets to pick the next question category and point value. If the question was not answered correctly, the team who chose the last question picks again.

Points

If a player from Team A buzzes in first and correctly answers a 100 point question, Team A will earn 100 points. If they answer incorrectly, they will lose 100 points. Team A may try to answer again. If they are correct, they will earn 100 points and their accumulative score will be 0. If they incorrectly answer the second time, they will lose another 100 points. Team A's score would then be -200 points. When contestants are choosing their category and point values from the next question, they may switch to any category and to any point value question. It should be noted that questions become more difficult as a person moves to higher point values.

Jeopardy/ Double Jeopardy/ Final Jeopardy The questions in Jeopardy are worth 100, 200, 300, 400, or 500 points. In Double Jeopardy, they are worth: 200, 400, 600, 800, or 1000 points. In Final Jeopardy, teams with positive scores may wager any amount of the total they currently have on the final question. Teams who do not have positive scores may not answer this question. Additionally, during the Final Jeopardy question, all team members may answer the question. Small slips of paper should be provided for each team to write their wager and answer on.

Agricultural Jeopardy Questions

Kansas Ag Products

- 100 = Bread, cereals, pretzels are all made from this. (Wheat)
- 200 = A main ingredient in some types of meal and tortillas. (Corn)
- 300 = A great source of protein, it is sometimes added to ground beef. (Soybeans)
- 400 = The number one agricultural product in our state. (Wheat)
- 500 = A great source for salt, this town gets it's nickname from this product. (Hutchinson)

Old MacDonald had a farm

- 100 =Another name for a bovine. (Cow)
- 200 = Angus, Charolais and Hereford are just a few types of these. (Cattle)
- 300 =This animal is a member of the swine family. (Pig or hog)
- 400 = This animal once roamed the ranges freely in historic Kansas. (Buffalo or bison)
- 500 = Dairy cattle must be milked this many times per day. (Twice)

Nutrition

- 100 = Milk is a good source of this nutrient. (Calcium)
- 200 = Breads, potatoes and pastas are a good source of this nutrient. (Carbohydrates)
- 300 = A good source of Vitamin C. (Fruit, some vegetables)
- 400 = This muscle builder is found in red meats. (Protein)
- 500 = A good source of beta-carotene, which is helpful to your eyesight. (Carrots)

<u>All I Need is More Power</u> (A photo of a piece of farm equipment will be shown and students must tell how it is used.)

100 = Tractor (Pulling various pieces of equipment)

200 = Round hay baler (Large round hay bales)

300 = Swather (Cutting hay)

400 = Square hay baler (Small square hay bales)

500 = Combine (Cutting and collecting various crops)

Abbreviations (The abbreviation is given and contestants must explain what it stands for)

100 = FDA (Food and Drug Administration)

200 = USDA (United States Department of Agriculture)

300 = GPS (Global Positioning System)

400 = BSE (Bovine Spongiform Encephalopathy or Mad Cow's disease)

500 = AI (Artificial Insemination)

Agricultural Double Jeopardy Questions

Farm Economics

- 200 = Out of the 52 million acres that makes up Kansas, how many are planted in wheat? (10 million)
- 400 = Each loaf of bread sold in a grocery store has what dollar amount of wheat in it? (.05)
- 600 =When you spend \$1.00 on a food product, how much goes to the farmer? (.23)
- 800 = A farmer is harvesting wheat and uses a combine on 135 acres. At a unit cost of \$10.00 per acre, what does it cost to harvest this land? (\$1350.00)
- 1000 = A bag of soybean seed costs \$20.00. You buy 200 bags to plant on your land. What is your total cost for seeds? (\$4000.00)

Food Safety

- 200 = Salmonella bacteria is commonly found on these foods. (Poultry products)
- 400 = The easiest way to prevent the spread of bacteria. (Hand washing)
- 600 = Ground beef is a common carrier of this bacteria. (E Coli)
- 800 = The number of bacteria that can fit inside an area that is one inch square. (1 million)
- 1000 = The temperature that hamburgers should be cooked to prevent you from getting sick from E Coli 0157:H7. (160 F)

Agriculture Careers

- 200 = This person is devoted to medically caring for animals, whether they be domestic or farm animals. (Veterinarian)
- 400 = The person whom most people think of when they mention the word, "farm". (Farmer)
- 600 = This person is trained to understand money and keep track of profit margins for someone in agriculture. (Accountant/Financial Manager)
- 800 = This person is interested in making sure sportsmen obey the rules set for outdoor wildlife activities. (Conservation Officer/Game Officer)
- 1000 = An occupation whose job skills needed might be: observing, listening, communicating and research.

 Areas that someone might concentrate in might be, plants, animals, food, soil, forests or chemicals.

 (Scientist)

<u>It's Used for What?</u> (In this category, another product other than what is normally thought of will be listed and contestants must decide what agricultural product it came from.)

200 = Disposable forks/spoons/knives (Corn)

400 = Crayons/lip gloss (Soybeans)

600 = Ethanol fuel (Corn)

800 = Milk/cooking oils/margarine (Soybeans)

1000 = BacO's – imitation bacon bits (Soybeans)

Agricultural Trivia

200 = This is the largest industry in Kansas. (Agriculture)

400 = A shelterbelt is an example of these. (Trees grown in locations to prevent wind erosion of the soil)

600 = Kansas City, Chuck and Sirloin are all types of these. (Steaks)

800 =The number one crop produced in Kansas. (Wheat)

1000 = Kansas' 31 million acres available for crops is second in area to what other state? (Texas)

Final Jeopardy Question

Hesston High School's mascot is the Swather. What is a Swather?