Byte-Sized Farming:
Planting with Precision Challenge Questions
Question Master Script

I would like to invite our teams to come forward.

(Wait while the teams are seated)

My name is _____ and I will be the Question Master for the Byte-Sized Farming: Planting with Precision Challenge Round.

You may buzz in at any time during the question.

However, I will stop reading the question when you buzz in.

Please do not give an answer until I call your name, or you will forfeit your opportunity to answer the question.

If the first person to buzz in gives an incorrect answer, or does not answer within five seconds, the other teams can buzz in at any time.

Correct answers are worth 10 points. There are 10 questions. Let's begin!

Challenge Question 1:
This is the term used to describe the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products.

Correct Answers: agriculture

Challenge Question 2:
Farmers often use this practice which can be described as the artificial application of water to land, typically for agricultural purposes, to support plant growth.

Correct Answers: irrigation

Challenge Question 3:
When thinking about what to wear today, someone may want to consider this - the short-term conditions of the atmosphere at a specific time and place.

Correct Answers: Weather

Challenge Question 4:
Using technology to improve crop yields and make better management decisions describes what practice?

Correct Answer: precision agriculture

Challenge Question 5:
Often confused with the short-term conditions of the atmosphere at a specific time and place, this term actually refers to the long-term average of weather patterns in a region, usually over 30 years or more.

Correct Answer: Climate

Challenge Question 6:
Farmers and ag engineers utilize a variety of precision agriculture tools to ensure proper output of water for specific areas. One of these tools is a device that measures or estimates the amount of water in the soil. What is its name?

Correct Answer: Soil moisture sensor

Challenge Question 7:
Name two factors that might impact how much water a farmer uses to irrigate their crops.

Correct Answer: Type of crop, soil type, weather and climate, stage of growth, irrigation system, field size and shape, topography, water availability, laws and regulations, cost of water

Challenge Question 8:

One benefit to using precision agriculture practices is to prevent this negative effect of farming which is the removal of the top layer of soil due to natural forces such as wind and water.

Correct Answers: soil erosion

Challenge Question 9:
This is one of the most widely used irrigation system on farms across the United States with tens of millions of acres irrigated using this method annually which is a self-propelled system that rotates around a central pivot point.

Correct Answer: Center pivot irrigation

Challenge Question 10:
Sometimes, farmers will put soil moisture sensors in their field at different places. If an area of a field already has enough water, when the pivot's sprinkler gets close to that area, the sprinkler can turn off. This allows farmers to prevent soil erosion while also saving water and what?

Correct Answer: Energy and money

Challenge Question 11:
The time required for a center pivot to rotate a full circle depends on a variety of factors. This time can range from hours to days. What are two factors that impact the length of time it takes?

Correct Answer: system size, pump, or well capacity and the amount of water to be applied at each application

Challenge Question 12:
Cotton, corn and peanuts are also known by this name which refers to an agricultural crop planted in rows.

Correct Answer: row crop

Challenge Question 13:
Farmers utilize a variety of irrigation methods to water their crops. Irrigation is used to supplement what?

Correct Answer: natural rainfall

Challenge Question 14:
How does precision irrigation help protect the environment?

Correct Answer: It stops water from being wasted and keeps excess chemicals from running off into rivers or lakes.

Challenge Question 15:
Many times, farmers will study weather and climate trends shared by the National Weather Service to predict the best times for planting crops, watering, etc. What organization operates the National Weather Service?

Correct Answer: The National Oceanic and Atmospheric Administration (NOAA)