



Intro to Agriscience
Precision Ag - Lesson 2 Quiz - ANSWER KEY

T/F Section – Reach each statement carefully and determine if it is a True (T) statement or a False (F) statement. Place a T or an F on the blank in front of the statement. If the statement is false, circle the word or words that make the statement false and then write the word or words that would make the statement true in the blank provided.

- True** 1. Electronic technology consists of hardware and software.

- False** 2. Sensors take signals from a monitor, interprets changes that need to be made and then send the signal to the meter to make the corrections. **Monitors take signals from sensors.**

- False** 3. Precision Ag maps are put together in sections, starting with yield. **Layers not sections.**

- True** 4. Electronic collars can track such things as feed intake and milk output in livestock.

- False** 5. The three main types of software used in Precision Agriculture are monitors, sensors and meters. **Hardware not software.**

Matching Section - Match each vocabulary word in the column on the left with its proper definition from the column on the right.

- | | | |
|-------------------------------------|---|--|
| <u>9.</u> Inputs | 6. Mechanical equipment used in Precision Agriculture. | |
| <u>11.</u> Precision Ag Maps | 7. A complex and highly technical array of sensors used in precision planting. | |
| <u>6.</u> Hardware | 8. Scale, hygrometer, thermometer and laser. | |
| <u>10.</u> Software | 9. Seed, irrigation, fertilizer, herbicide, fungicide. | |
| <u>8.</u> Sensors | 10. Computer programs used in Precision Agriculture. | |
| <u>7.</u> SmartFirmer | 11. Yield, subsoil moisture, organic matter, fertilizer and irrigation application. | |

Multiple Choice Section - Reach each question or statement carefully. Circle the correct answer OR answers from the choices below each question.

12. Things specifically related to seeds that can be changed using Precision Agriculture include:
- a. Variety** **b. Spacing** c. Moisture **d. Depth**



13. An agricultural producer can minimize the risk to _____ by reducing nitrate leaching and runoff.
 - a. himself
 - b. livestock
 - c. human lungs
 - d. the environment
14. Because of _____, an ag producer doesn't have to farm a lot of acres to use Precision Agriculture.
 - a. diversity
 - b. scalability
 - c. singulation
 - d. flow
15. A GPS receiver gets its information from _____.
 - a. sensors
 - b. the Internet
 - c. Earth-orbiting satellites
 - d. drones

Short Answer/Fill-in-the-Blank Section - Read each statement or question carefully. Fill in the blanks with the correct answers or write the correct response in the space provided below each question.

16. Name 2 things that can be “sensed” in an animal’s body by using Precision Agriculture.

The last time an animal ate or drank, body temperature, heart rate, etc.

17. A moisture *sensor* measures the amount of moisture in grain.
18. A flow *meter* works with flow sensors to control the amount of fluid that is allowed to flow through a sprayer.



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19. Using the words provided as well as arrows, draw the proper flow of a “simple delivery system” in the proper order.

Application Device
Flow Meter

Flow Sensor
Pump

Supply Tank

Note: Draw your “diagram” in the space below.

Supply Tank → Pump → Flow Meter → Flow Sensor → Application Device

20. What are two things related to irrigation that can be controlled using Precision Agriculture?

When to add water and how much water to apply.

21. **GPS** allows a field to be surveyed with ease.

22. Precision Agriculture helps an ag producer make more informed **decisions**.

23. Ag ag producer does not have to buy all new **equipment** in order to use Precision Agriculture.

24. It may take a very long to gather the needed **data** to implement Precision Agriculture.

25. It may be difficult for older producers to learn to **analyze** the information provided by Precision Agriculture.