Components of Precision Agriculture

- A _____

- Equipment with _____

- Equipment with _____

- A _____

- _____

GPS Receiver

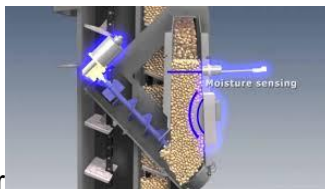- _____ the equipment _____ in a field

Equipment with Sensors

- "Sense" the _____ in which you are farming

- "Sense" the _____ of the equipment

- Take _____ about each _____ of the field

High Rate Seed Sensor   Moisture Sensor

Equipment with Meters

- Control the _____ of _____

    - _____, fertilizer, pesticides, _____, etc.

- /Can _____ the equipment
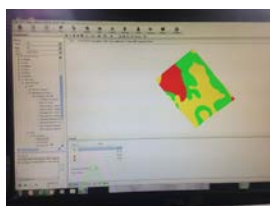
    - Aids in _____ field _____

Monitors

- Indicate the _____ inputs are being applied.

- Tells the operator if equipment is working at _____ performance.

    - Gives off a _____ if not working properly.

- Acts as a user _____.
    - _____ can make adjustments _____.

- _____ all _____ gathered by GPS, sensors and meters.
    - Used _____ to help with _____ making.
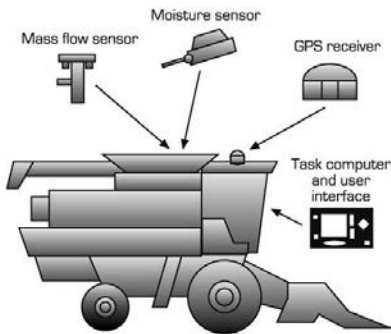

Software

- Keeps track of information _____.

    - Throughout the _____

    - Across multiple _____

- Allows operator to
    - _____ data

    - Make _____ decisions to improve production

        - "_____" inputs to "_____" outputs and profit

Putting it all Together

"Big Data Comes to the Farm"

- U. S. Farms generate $_____ from crops.

- Almost all new farm equipment is equipped with _____.

- _____% of farmers report using some sort of precision data.

- 80% of data now _____.

- Farmers choose whether to use data themselves, _____ it locally or
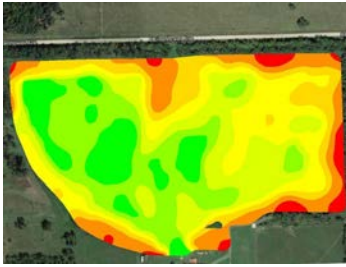
  to upload it to the _____.

What is the Goal of Precision Ag?

- Primary goal = identify _____ in the field.

  - _____ in the field

- Allows an operator to _____ _____

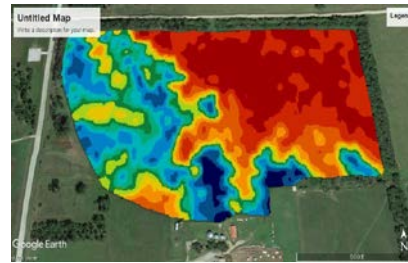 practices to the different _____ of a field.

Intro to Ag
Precision Ag - Lesson 1, Part B

Yield Map

Soil Quality Map

Analyze the Maps

- Compare the Soil Quality and Yield Maps

  - What similarities are there?

  - What could account for the similarities?

  - What differences are there?

  - What could account for the differences?

Why is Precision Ag and Management Used?

- _____ Management!

    - Management on a _____ scale.

        - Look at _____ portions of a field

        - Manage its _____ characteristics

        - Place _____ accordingly for that portion

    - Saves _____ on seed, chemicals, water, time, etc.

    - Add the right _____ at the right _____, in

      the right _____ at the right _____!

    - Can increase _____.

        - Put less inputs where the field is less _____ no matter what
          you do.

        - Apply the most and best product to the _____ productive areas.

        - Be more _____ with input placement.

            - Example: _____