Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_ Period: \_\_\_\_

**Soil and Agriculture Research Activity**

**Objective:**

Students will research the topics covered in the soil and agriculture chapters. Students will create a product that describes and illustrates problems and solution associated with each topic.

**Instructions:**

* Students will research information over the following topics: **Circle your topic**
  1. Hydroponics vs Aquaponics
  2. CAFOs vs Free Range
  3. Integrated Pest Management- Biocontrol, intercropping
  4. Integrated Pest Management- Crop rotation,, natural predators
  5. GMOs
  6. Sustainable Agriculture- Contour plowing, windbreaks, perennial
  7. Sustainable Agriculture – No-till agriculture, strip cropping
  8. Irrigation- Drip irrigation, flood irrigation
  9. Irrigation- Furrow irrigation, spray irrigation.
  10. Waterlogging and Salinization
  11. Overgrazing
  12. Green Revolution
  13. Pesticide Types
  14. Pesticide Treadmill
  15. Salinization
  16. Tillage Methods-Tilling, slash and burn farming, and using fertilizers
  17. Ogallala Aquifer
  18. Synthetic fertilizers
  19. Desertification and Overgrazing
* In your product:
  1. Describe you topic.
  2. Include ALL the problems associated with your topic. (Ethical, economic, environmental)
  3. Include ALL the solutions for your topics.
  4. Provide a realistic action/step you could take to help out.
  5. Provide a visuals (picture, diagram, chart, table) to help better understand the topic.
* Ensure that your information is accurate and well researched.
* Make it creative and have fun with it.
* You and your partner will present this to the class.
* As your classmate present, you will be collecting information for each topic. It is important you pay attention because all the topics can be on the AP test.

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| **Topic** | **Negatives** | **Solutions** | **Realistic Action** |
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