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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