

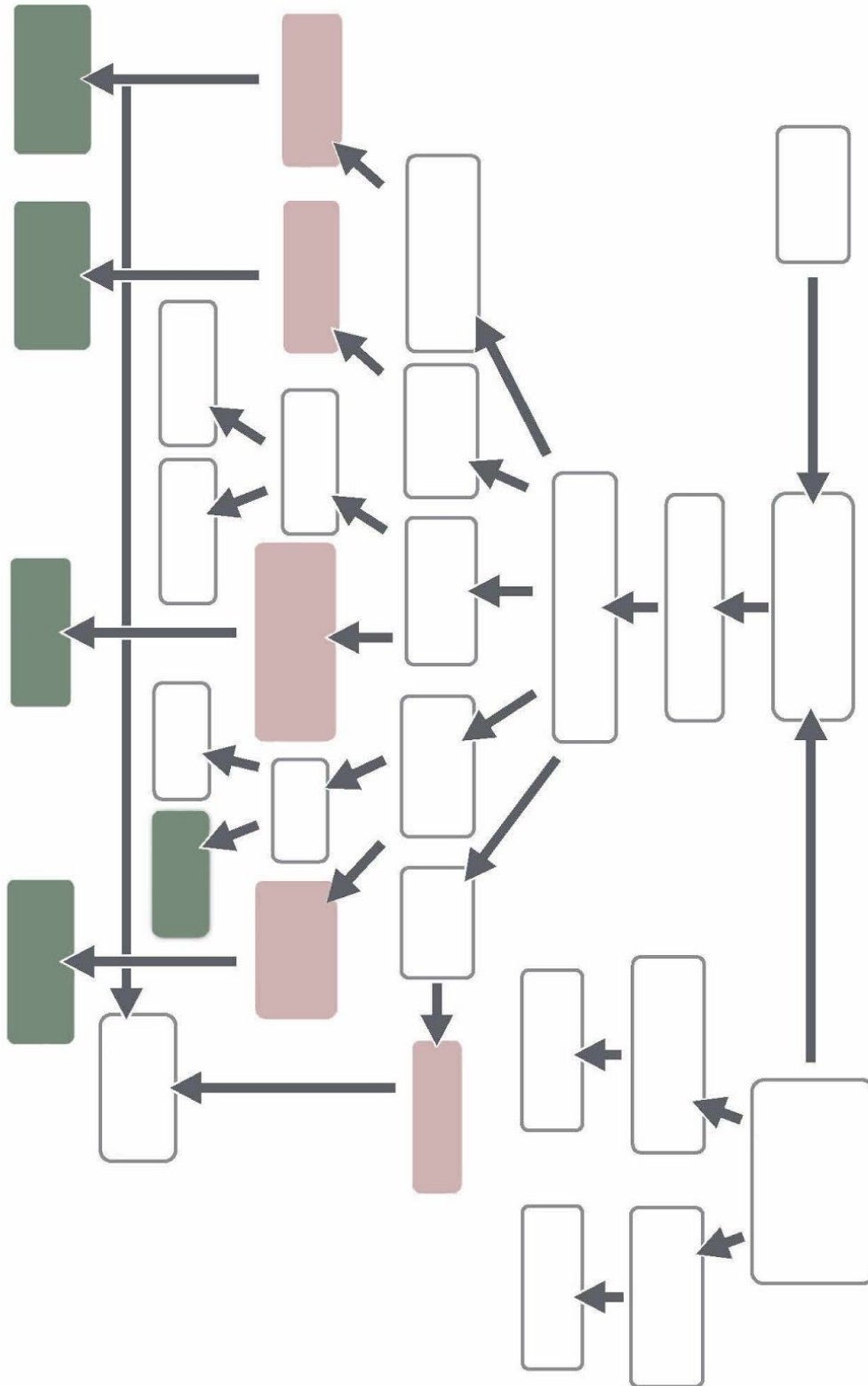
**Bozeman AP Environmental Science | Big Idea #4 - Land & Water Use**  
**016 - Agriculture**

Name: \_\_\_\_\_ Block/Period: \_\_\_\_ Date: \_\_\_\_\_

**Students:** It is recommended that you watch the video with subtitles ON; be prepared to pause and rewind. The video is ~10 minutes long, but this worksheet will take you around ~30 to 35 minutes to complete. There will be a review / discussion afterwards requiring you to record corrections AND summarize additional material / information.

Description (-½ point for each time the rubric is not followed)	Point Value
Each question has been answered	0   ½   1
Each question has been answered in a full sentence	0   ½   1
Each answer has avoided 'it' or 'they' statements, by being clear on the topic of the answer	0   ½   1
<i>Review:</i> Answers that were incorrect are corrected, <i>in a different color</i>	0   ½   1
<i>Discussion:</i> 2 OR more <i>summary</i> statements of the additional material / information, <i>in a different color</i>	0   ½   1
Score:	_____ / 5

1. Listen to Mr. Anderson describe the various parts of the concept map, and pause after he reveals a new word, and filling in that word.



2. **Analyze** what the red/green color coding means in the concept map.

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3. **Analyze** how traditional (historical) farming leads to famine/starvation/etc.

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4. **Describe** what Industrial Farming does.

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5. **Fill-in & Describe** the benefits and disadvantages of *Monocropping*, and **Explain** how we can mitigate the disadvantage of this method of agriculture.

Description	Benefit	Disadvantage
<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
How do we mitigate (fix) this disadvantage? <hr/> <hr/> <hr/>		

6. **Fill-in & Describe** the benefits and disadvantages of *Irrigation*, and **Explain** how we can mitigate the disadvantage of this method of agriculture.

Description	Benefit	Disadvantage
_____	_____	_____
_____	_____	_____
_____	_____	_____

How do we mitigate (fix) this disadvantage?

\_\_\_\_\_

\_\_\_\_\_

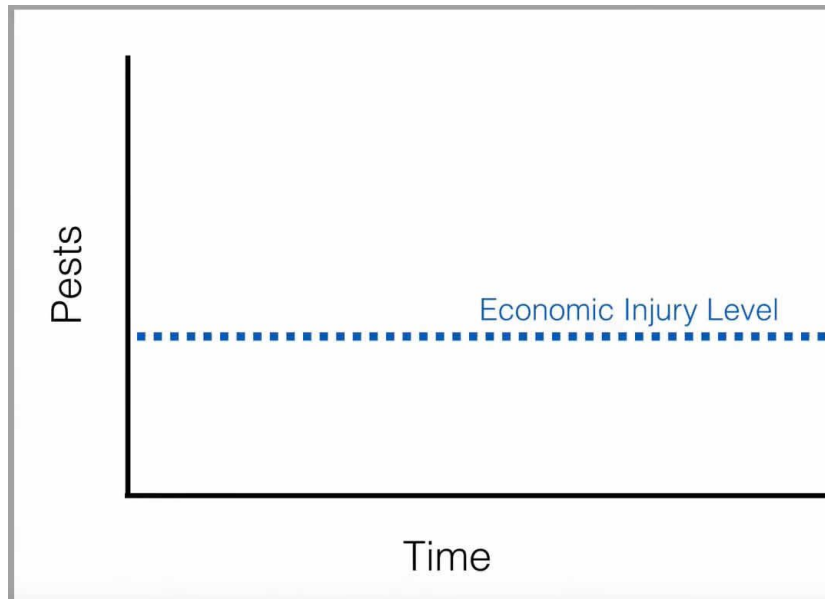
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7. **Fill-in & Describe** the benefits and disadvantages of *Pesticides/Herbicides/Fungicides (and other)*.

Description	Benefit	Disadvantage
_____	_____	_____
_____	_____	_____
_____	_____	_____

Mitigation is in the next questions...

8. **Fill-In** the *Economic Injury Level* graph and answer the following questions.



9. **Label** on the above graph when it is appropriate to use IPM (Integrated Pest Management) techniques.
10. **List** mitigation techniques appropriate for IPM (Integrated Pest Management), and **Analyze** why these techniques would be effective.

Technique (method)	Analysis
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**11. Fill-in & Describe** the benefits and disadvantages of *Fertilizers*, and **Explain** how we can mitigate the disadvantage of this method of agriculture.

Description	Benefit	Disadvantage
_____	_____	_____
_____	_____	_____
_____	_____	_____

How do we mitigate (fix) this disadvantage?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**12. Describe** Genetically Modified Organisms (GMOs).

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