TEXT ANNOTATION

Use the following directions to annotate each of the texts in this journal.

Draw an arrow pointing at any words, phrases, or paragraphs that help the reader identify something new about the topic presented.

Draw a triangle next to or around any words you do not know. Then, look up the definition of the word. Write it in the margin or in your notes for future reference.

Draw a star next to any significant quotes. In the margin or in your notes, write WHY you believe the quote is significant to the passage.

Draw a rectangle around the part of the passage that BEST represents the author’s main idea. In the margin or in your notes, explain why.

Draw a circle around any use of figurative language. In the margin or in your notes, explain how the figurative language impacts the passage.

Place a sticky note next to any part of the passage that you do not understand. Write a specific question on the sticky note for class discussion.

Highlight ONE quote that stands out most to you. In the margin or in your notes, explain why this quote made such an impact on you.

Underline any EXAMPLES the author provides about the topic.

Cross out any information that is irrelevant to the topic, if any.

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Genetically modified organisms, or GMOs, are plants or animals whose genetic makeup is modified in a laboratory. This process is called genetic engineering or transgenic technology. By artificially inserting or removing the gene components of another organism, genetic engineering gives the original organism new characteristics. As with most scientific issues, there are pros and cons which need examining.

An enormous advantage to genetically engineered crops is they are made more resistant to insecticides and herbicides. This resistance allows farmers or ranchers to grow crops faster and increase their yield. Over 90% of the soybeans and corn crops have already been genetically modified. Some seeds are engineered to tolerate heat, cold, or drought. Imagine the advantage this has to farmers in drought-ridden areas across the globe.

Other engineered seeds give GMO foods brighter colors which appeal to buyers. Increasing the shelf-life is another advantage to GMO products. Ever notice the expiration date of your snack food? This long-lasting effect helps in shipping them to remote locations. Have you wondered why watermelons no longer have large black seeds? The seeds in both watermelon and grapes have been genetically engineered almost to disappear.

Why is there a reluctance in some people to eat GMO foods? Some studies have shown that GMO corn and soybeans fed to rats led to a higher risk of them developing liver and kidney problems. Currently no one knows if these results transfer to humans. People opposed to GMOs are not confident they are thoroughly tested, and if these organisms do not occur naturally, these people are highly suspicious.

Some people believe GMOs’ effect on people with allergies is unpredictable. There are lots of GMOs used in snack food, which makes it hard for people with allergies to avoid them. Other people believe there might be a connection between GMOs and cancer. There is no direct link proven at this time. Some also wonder if there is a link between GMOs and the rise of antibiotic-resistant bacteria. Again, more research is needed. However, many seeds have been engineered using antibiotic-resistant genes.

It appears that GMOs are here to stay, so consider your options carefully when deciding whether they are worth the avoidance.
Answer the questions below based on the article about GMOs.

**COMPREHENSION QUESTIONS:**
1. What is a GMO? Underline your answer in the text.
   ____________________________________________________________________________
   ____________________________________________________________________________

2. How is an organism modified?
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

3. What is an advantage to genetically engineered crops? Highlight your answer in the text.
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

4. Why is there reluctance to embrace GMO crops?
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

5. How has a watermelon been genetically altered?
   ____________________________________________________________________________
   ____________________________________________________________________________

6. Do you have any problem eating GMO foods? Why or why not?
   ____________________________________________________________________________
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**Mini-PROJECT: DESIGN A MENU**

A local restaurant has hired you to create an organic, farm-to-table menu for their establishment. Research where you would get the fruit, vegetables, and meat without any GMOs. Then, create a menu based on the information you find. Your menu should include:

1. Appetizers, entrees, desserts, and drinks (at least two of each)
2. Menu items that are based on local or surrounding farms without GMOs
3. A unique and creative design