#### **GMO Issues and Questions**

It is time to dive a bit deeper into the different facets of the arguments for and against the use of GMOs. As you research, keep the following things in mind:

- Our Essential Question for the Unit What role should GMOs play in creating a safe, diversified and stable food economy?
- Our Socio-Scientific Reasoning Competencies posted on the wall.
  Be particularly mindful of the skepticism piece during this activity.

# You will be assigned a set of questions below to carefully research. Your tasks will be to:

- 1. Find as much information regarding these questions as possible, using a variety of resources. Be sure to write down all of your sources.
- 2. Carefully analyze two of your sources using Knowing Your Sources.
- 3. Be ready to share what you learned in regard to your research and your sources in a Socratic Seminar with the following guiding question:
  - "What have we learned about the issues surrounding GMOs?"

#### Research Questions:

What are sustainable solutions besides GMOs?

- What policy solutions are being ignored because of GMOs?
- If there was better farming infrastructure globally, would GMOs be needed?

#### Human health and GMOs?

- What research has been done on long term negative effects?
- What are possible positive effects?
- What are the potential effects of stacking genes?

Effects on ecosystems because of GM crops and animals?

- Superbugs and weeds?
- Could GMOs become invasive species in natural ecosystems?
- What are the effects of roundup on water ecosystems, and is it the lesser evil compared to other alternative herbicides that farmers may use?
- What specific research has been done to provide evidence?

Who owns the GMO's and what legal issues could come from ownership of GMO's in the form of patents?

- How are patents granted?
- What companies and public sector groups are developing GMOs?
- How does ownership of GMOs affect farmers?

What standards do GMOs have to pass to be put on the market?

- What are the FDA, USDA, and EPA looking for to determine they are safe?
- How long and how much does it cost to develop a GMO to put on the market?

# GMO for public wellbeing -

Your Research Question:		
Sources	Information from sources	

Analysis of 2 Sources Using Knowing Your Sources		
Source 1		
Source 2		

Socratic Seminar Preparation		
Main Points	Evidence and Source Supporting Your Point	
Questions you'd like to bring to the grou		
Questions you'd like to bring to the group		

## **Final Response**

Now that you have participated in the food symposium, you will abandon your stakeholder's position and share with us YOUR position. Taking in consideration all of the points brought to the symposium, answer the unit prompt in 1-2 pages:

What role should GMOs play in creating a safe, diversified and stable food economy?

## Specifications:

- Your response should have a clear thesis with thoughtful evidence and reasoning to support your thesis.
- You may complete this response individually or in a small group. You will have class time to write.
- No need to do further research. You should have plenty of information from the symposium and from our class materials throughout the unit.
- We will use the CISS Skills Rubric to evaluate your response.

2017-2018
According to Food Inc., what changes to food production have occurred in the last 50 years?
What are the different methods that our food supply is being manipulated by corporations?
What are some things about meat production you were unaware of?
What are some things about plant production you were unaware of?

Food Inc. Film Watching Guide

What are your thoughts on the part of the film where the farmer was on the blacklist for seed washing?
What GM issues does Food Inc. address? What is your stance?
Should there be a nationwide policy for labelling food products? Why or why not?
What steps if any, will you take concerning your food habits after watching Food Inc.? If you won't be taking any, why not?