## FARMLAND: GMOs & Organic Agriculture- Virtual Learning AdaptionTarget Grade Level: 9th-12th Grade

Full Lesson Plan: <https://www.iowaagliteracy.org/Article/FARMLAND-GMOs-Organic-Agriculture>

This document is meant for you, the teacher, to use to convert the lesson plan into a virtual learning module for your students. You can use the steps outlined below to create different elements of a Google Classroom or other online learning module. You can also send the steps directly to your students in a PDF, present them in a virtual meeting, or plug them into any other virtual learning platform you use. Find more virtual lessons here: [Virtual Learning.](https://www.iowaagliteracy.org/Tools-Resources/Other/Virtual-Learning)

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| Engage | Start by completing this pre-quiz. You can write your answers on paper.* [Pre-quiz](https://drive.google.com/file/d/1O-ihUdg05_4mSNEr8uwtz1TG2XV9oAbr/view?usp=sharing)

Then make a KWL (Know-Want to Know- Learned) chart on paper. Fill out the “Know” and “Want to Know Section” about GMOs and Organic Agriculture. If you don’t know how to set up a KWL chart, click [here](https://www.eduplace.com/graphicorganizer/pdf/kwl.pdf) for an example. Keep your chart for the end of the lesson.  |
| Explore | Watch these videos and take notes.* [How Do You Make a GMO?](https://www.youtube.com/watch?v=2G-yUuiqIZ0)
* [Plant Breeding: GMO, Cross Pollination & Cross Breeding Explained](https://www.youtube.com/watch?v=uVWsDUWRgT4)
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| Explain | Read the information on the first page of the worksheet. You, the student, will need the rest of the worksheet later, so keep it handy. Then watch the video “Farmland” from 40:08 – 48:29. Take careful notes on the various farmers’ thoughts on chemicals, GMOs, and organic production.* [Farmland Worksheet](https://docs.google.com/document/d/1rgDvolhjZvy1AGi20tkTYBkF3m0HlfSIikUUceTYSVk/edit?usp=sharing)
* [Farmland Video](https://tubitv.com/movies/460157/farmland)
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| Elaborate | Now, complete the second page of the Farmland worksheet. Make a copy, answer the questions, and then turn it in.  |
| Evaluate | Finally, look back at your KWL chart and your pre-quiz. Correct the pre-quiz using what you learned about GMOs and organic agriculture and finish the KWL chart by completing the “Learned” section. Turn in a picture of the pre-quiz and the KWL chart.  |