## Cars, Corn, and You- Virtual Learning Adaption Target Grade Level: 6th-8th grade

Full Lesson Plan: <https://www.iowaagliteracy.org/Article/Cars-Corn-and-You>

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 creating a Venn Diagram (if you don’t know what a Venn Diagram is, here’s an [Example](https://arbs.nzcer.org.nz/sites/default/files/images/venn.gif)) individually comparing the energy that humans need and the energy cars and trucks need. How are they similar? How are they different? What do they have in common?  Here’s some questions to think about that might help:   * Where do humans get their energy? * Why is it important that humans have energy? * What are some things that we couldn’t do without energy? |
| Explore | Journal about this question: “Where does the energy ultimately come from which allows humans to function and runs our vehicles through the use of gas and ethanol?” |
| Explain | Watch the video on how ethanol is made and then view the PowerPoint.   * [How Ethanol is Made Video](https://www.youtube.com/watch?v=59R-NqykoXs) * [How Ethanol is Made PowerPoint](https://drive.google.com/file/d/1gQ-nxEZd3Rd92brfGLZkJFjbFeMYMyfe/view?usp=sharing) |
| Elaborate | Think about our food chain and how a biodiesel “food” chain would look. How would it show the energy flow from corn or soybeans (the producers) to a car or truck? |
| Evaluate | Open the linked document below, make a copy, and complete the assignment. Make sure to turn it in when it is completed.   * [Cars, Corn and You](https://docs.google.com/document/d/1l7IQeFlYB_XBlCUEXvIhOIcwM1RxeaRUtL2CV1GB59Q/edit?usp=sharing) |