## Teamwork to Protect the Harvest: Soybeans & Careers Target Grade Level: 6-8th Grade

## Full Lesson Plan:

## [https://www.iowaagliteracy.org/Article/Teamwork-to-Protect-the-Harvest]( https://www.iowaagliteracy.org/Article/Teamwork-to-Protect-the-Harvest)

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 lesson 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 | Farmers and agronomists count aphids on soybean plants to determine their impact. If there are too many, they may need to spray insecticides to control the aphids and save the crop Soybean aphids have been a problem since they were first introduced between 2000 and 2004. Farmers, scientists, engineers, and others have worked together to find solutions to this problem. |
| Explore | Watch the video to learn more about how aphids affect soybeans and review what was covered using slides 2-7 of the Managing the Threat slides.   * [Soybean Aphids Video](https://youtu.be/8fGo9OGIl-g) * [Managing the Threat slides](https://docs.google.com/presentation/d/1Ciu7iCsfe4_Cnvkf-n3HTngGaeFdFwLcQQdEoYx_akY/present?usp=sharing) |
| Explain | Now, read the about how people in a wide variety of careers work together to solve the soybean aphid problem.   * [Managing the Threat - Careers](https://www.iowaagliteracy.org/Article/File/get?path=Files%2Farticle-169426%2FCareer%20cards.docx) |
| Elaborate | Farmers and agronomists scout for pests by counting aphids on a sample of plants in the fields. Watch the video to learn how to scout for aphids. Review this technique using slides 8 & 9 of the Managing the Threat slides linked in the Explore section. [Scouting for Aphids video](https://youtu.be/KXg_pOyZeqE)  Practice what you learned by scouting for aphids using the sample field document. In this example, assume that the leaves were taken from plants 10 paces apart. Therefore, you will only need to move 3 pictures between counting each sample. Remember to move in a random direction up, down, left, right or diagonal each time. Record your results on the on the aphid scouting worksheet and follow the instructions to determine if you should treat or not.   * [Sample field](https://docs.google.com/document/d/1w5Mky7lLLXUMOJQRXZX4Idcof0lYy8EOcbRbjIIvsVc/view?usp=sharing) * [Speed Scouting Worksheet](https://docs.google.com/presentation/d/1Ru8jGsytbveNU-lK338arC3lBPfGYiIb_-A0ULFrzc8/copy?usp=sharing) |
| Evaluate | Answer these questions to review what you learned.   * Should you treat the field? * How did you arrive at this decision? * What career that you learned about interests you most? Why is it a good fit for your skills and interests?   Record your answers on slide 2 of the Speed Scouting document. |