Plant Pests

Audience: 9-12 grade

Activity Length: Four, 45 minute class periods

TEKS:
English
➢ English I §110.36.c
  • 1.A, 1.C, 2.A, 11.E, 11.F, 11.I
➢ English II §110.37.c
  • 1.A, 1.C, 2.A, 11.E, 11.F, 11.I
➢ English III §110.38.c
  • 1.A, 1.C, 2.A, 11.E, 11.F, 11.I
➢ English IV §110.39.c
  • 1.A, 1.C, 2.A, 11.E, 11.F, 11.I

Electives
➢ Principles of Agriculture, Food, and Natural Resources §130.2.c
  • 1.B, 4.B, 6.A, 6.B, 11.B
➢ Floral Design §130.20.c
  • 8.D
➢ Landscape Design and Management §130.21.c
  • 7.E, 7.G
➢ Turf Grass Management §130.22.c
  • 4.B
➢ Horticulture §130.23.c
  • 5.A
➢ Greenhouse Operation and Production §130.24.c
  • 9.A
➢ Advanced Plant and Soil Science §130.25.c
  • 15.C

Materials Needed:
  • Plant samples
  • Note sheet

Engage:
  • Ask students if they know what a plant pest is. See if they can name an example of a plant pest. You might even show pictures to see if students recognize any pests. Facilitate this interaction for a few minutes to get students thinking and engaged in the topic.

- o *Note: This could be posted in a discussion board to account for a virtual setting.*
- Have students watch the Texas Farm Bureau "Plant Pests" video here: https://vimeo.com/445696225. Key words to note will be displayed on the screen.
  - o Ask students to take notes while they watch the video. The information in the video could aid them later in the lesson.

Explore:
- Prepare plant samples for students
  - o Select various samples – some with pest damage and some without
  - o *Note: The plant samples could be digitally presented to students (via photographs) to account for virtual learning.*
- Have students observe the plant samples. Encourage students to note how the samples look, possible indicators of pest damage, etc. (You can expand on these suggested questions to have them better align with the available samples.)
  - o Students should take notes as they observe. Questions that arise during observation should also be recorded.

Explain:
- Facilitate a discussion with the class about their observations. Have students share their observations, ask questions that they recorded, etc. Write down common observations that the students made. Take this opportunity to answer questions, direct students to helpful resources that relate to the questions they ask, and share information with them about the particular samples that they observed (i.e. type of pest damage, type of plant, etc.)
- Key Words:
  Define the words that relate to pests/how the word is important when managing pests.
  - o Pest
  - o Life Cycle
  - o Early Detection (Think: How can early detection take place?)
  - o Pesticide
  - o Acre
  - o Surveying

Elaborate:
- Have students research one plant pest. They should gather information such as how the pest damages plants and possible mitigation techniques (including pesticides).
  - o If the teacher desires, students can turn in the following notes page that records their research.

Evaluate:

The below rubric could be used to grade this assignment.

- Assignment: Give an **informative speech** about what was learned through research. **REMEMBER:** This is an informative speech, not an opinion or persuasive speech. Students should not aim to sway the audience one way or the other; rather, students should educate the audience based on facts.

Source	Information Learned

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Grading Category	Considerations	Comments	Score
Informative	Is the speech informative? Does it educate, or is the focus on opinion?		_____/30
Use of Research	Does the majority of the information shared come from research? Does the student cite sources?		_____/30
Speech Organization	Does the student convey/share information in an organized manner? Is the speech well thought out?		_____/10
Student Learning Outcome	Did the student clearly gain an increased understanding about the topic – plant pests?		_____/20
Grammar/Presentation	Did the student use proper grammar and speech? Was the student focused and prepared to share information with the audience?		_____/10
			Total Score_____