



Lesson Nine: Master Stewards

Grade Level: 5th Grade

Time: 30-45 minutes

Essential Question: How can we be stewards of Wyoming's agriculture to benefit current and future generations?

Objective: Students will read and analyze three different responses to a scenario to identify which lens was used in making the stewardship decisions.

Purpose: Students utilize their understanding of ecosystems, economic cost, and culture to make a stewardship decision.

Required Materials/Resources:

- 2 flyswatters
- Copy of the 5th Grade Agriculture Glossary
- 5th Grade Master Steward worksheet (one per student) - (Sources 1-2)
- 5th Grade Master Steward Scoring Criteria

Suggested Teacher Preparation:

- Set up the flyswatter game
- Review the scoring criteria

Standards:

Science: 5-ESS3-1, 3-5-ETS1-2 (DCI,SEP) (Practiced/Encountered)

Social Studies: SS5.1.1, SS5.2.2, SS5.3.2 (Practiced/Encountered)

Vocabulary: Reference vocabulary from previous lessons


TEACHER NOTE:
This assessment is not designed to test your students' understanding of the science concepts. Each of the aspects of the science standards were assessed in the lessons in which instruction around these ideas occurred. This summative assessment is intended to assess students understanding of making stewardship decisions on a holistic level. The assessment will require students to write in order to express their understanding, but writing is not one of the scoring criteria that will be applied to this assessment.

Instructional Procedure/Steps:

1. Students will review important unit vocabulary by playing “Flyswatter.” Use the glossary as a resource or the vocabulary listed in each lesson to write a variety of vocabulary terms from the unit on the board. Include enough terms to cover important content and ensure that all students will have at least one turn at the board. Randomly split students into two teams and give each team a flyswatter. Students will face off in pairs, one student from each team. Every time two students come to the board to face off, read the definition of one of the terms. (Check off words on the copy of the glossary as you use them.) The first player to swat the correct term wins the round. If there are any terms that students struggle to remember during the game, take a moment to stop and discuss them, reminding students of the contexts in which they were used during the lesson. Those terms can be repeated in a future round of the game.



In this task, students will be engaged in the higher order thinking skill of evaluation.

2.  Pass out the 5th Grade Master Steward worksheet to students and say: **“You will read about a final agricultural challenge and how three different people respond to that challenge. You will list the components of the ecosystem described in the summary on the graphic. Finally, you will decide which person made the best stewardship decision and explain why. Are there any questions?”** Do not discuss any potential answers as students will formulate these on their own. Allow students plenty of time to respond to the task. Collect the worksheets when students finish.

3. On the following day after scoring assessments, award points for the stewardship game, and have students move their game pieces. A point can be given for each aspect of the scoring criteria. Consider point awards with relation to current board game position in how many points to award. Celebrate students' successful acquisition of stewardship skills.
4. Have students share what they learned about complex stewardship decisions with a partner, or as a class.

Assessment: Use provided scoring criteria to evaluate students' Master Steward worksheets.

Credits/Sources:

1. University of Wyoming, Department of Plant Science, Dr. Andrew Kniss.
2. University of Wyoming. Colorado State University. (2013, August). *Cheatgrass Management Handbook*. Retrieved August 26, 2017, from <http://www.wyomingextension.org/agpubs/pubs/B1246.pdf>