

Advanced Crop Science

Curriculum Guide: *Advanced Crop Science*

Unit: X. Cotton Production

Unit Objective:

Students will demonstrate an understanding of basic principles of cotton production by explaining, in a slide show presentation, a key aspect of cotton production in their state.

Show-Me Standards: 1.8, SS7

References:

Advanced Crop Science. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Agriculture in the Classroom. Accessed March 16, 2004, from <http://www.agclassroom.org/>.

Cotton. *Missouri Farm Facts*. Accessed November 5, 2003, from <http://agebb.missouri.edu/mass/farmfact/crops/cotton/index.htm>.

Cotton. MU Extension. University of Missouri-Columbia. Accessed November 5, 2003, from <http://muextension.missouri.edu/explore/agguides/crops/#Cotton>.

Crop and Plant Science Links. Agripedia. University of Kentucky College of Agriculture. Accessed March 16, 2004, from <http://www.ca.uky.edu/agripedia/links/linkcrop.htm>.

The World of Cotton. National Cotton Council of America. Accessed November 5, 2003, from <http://www.cotton.org/econ/world/index.cfm>.

Students may use additional outside sources to complete this activity.

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Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 8.
- Students will complete AS 1.1, Soil Nutrients Needed by Cotton; AS 2.1, Cotton Variety Seed Selection; AS 5.1, Scouting a Crop; AS 6.1, Evaluating Harvested Cotton; and AS 7.1, Cotton Quality and Effect on Price.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. X-6, p. X-45 (1), and p. X-76.

Performance-Based Assessment:

Students will be divided into groups. Each group will develop a slide show using presentation software that explains a key aspect of cotton production in the state. Topics could include, but are not limited to, steps of production; major pests, weeds, and diseases; most commonly farmed varieties; related industries found within the state; and overall importance to the state’s economy. Students will present their completed slide show to the class.

Assessment will be based on the overall content and presentation of the slide show.

**Unit X—Cotton Production
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group a topic related to cotton production in the state. Topics could include, but are not limited to, the following:
 - Steps of production
 - Major pests, weeds, and diseases
 - Most commonly farmed varieties
 - Related industries found within the state
 - Overall importance to the state's economy
2. Have students develop a slide show using presentation software that illustrates and explains their assigned topic.
3. Students may use material found in the unit or discussed in class as well as additional outside material to complete their slide show.
4. Students may not use the source material word for word and must provide a complete bibliography of their sources.
5. Have students present their completed slide shows to the class.
6. The final assessment score will be based on the overall content and presentation of the slide show.
7. **ADDITIONAL ACTIVITY:** As a class project, plant some sample cotton seeds and have students follow the plants' growth stages over the course of the unit or longer, if desired.

**Unit X—Cotton Production
Student Handout**

1. The instructor will divide the class into groups and assign each group a topic related to cotton production in the state.
2. Create a slide show using presentation software that illustrates and explains your assigned topic.
3. In addition to illustrations, include charts, graphs, or other elements as needed to make your presentation interesting and informative.
4. You may use material found in the unit or discussed in class as well as additional outside material to complete your slide show.
5. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources following your presentation.
6. Present your completed slide show to the class.
7. Your final assessment score will be based on the overall content and presentation of your slide show.

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Unit X—Cotton Production Scoring Guide

Name _____

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content	Information is complete and facts are accurate	Failed	Poor	Fair	Good	Excellent	X 8.75	
Supporting Materials	Slides – illustrations, graphs, charts, etc. – emphasize key points	Failed	Poor	Fair	Good	Excellent	X 8.75	
Presentation of Slide Show	Slide show is well organized and eye-appealing	Failed	Poor	Fair	Good	Excellent	X 5	
Delivery of Slide Show	Slide show is well delivered and holds audience interest	Failed	Poor	Fair	Good	Excellent	X 2.5	
TOTAL								

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Final Assessment Total _____/100 pts.

Comments:

