

Agricultural Science II

Curriculum Guide: *Entomology*

Unit Objective:

Students will demonstrate an understanding of insects by collecting, classifying, and displaying 30 insects found in Missouri.

Show-Me Standards: 1.8, SC4

References:

Entomology. University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

Field guide for insects (useful for students to classify their collection)

Students will use additional outside sources to complete this activity.

Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 7.
- Students will complete JS 2.1, Making a Killing Jar; JS 2.2, Labeling Insects; JS 2.3, Spreading the Wings of Butterflies and Moths; AS 2.1, Making an Insect Collection; WS 3.1, Insect Fact Sheet; WS 3.2, Insect Orders; and WS 6.1, Reading an Insecticide Label.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. III-50.

Performance-Based Assessment:

Students will collect, classify, and mount 30 different insects for display. The collection will be supplemented with an explanation of each insect's name, life cycle, main food source, and control methods.

Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.

**Entomology
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. Each student will create an insect collection of 30 insects found in Missouri.
2. As part of the collection, students will provide explanations for each insect.
 - a. The explanations will include the following:
 - ☐ Name of the insect
 - ☐ Life cycle
 - ☐ Main food source
 - ☐ Control methods
 - b. Students will need to use outside sources to find their information.
 - c. Students may not use the source information word for word and must provide a complete bibliography of their sources with their collection.
3. For catching, preserving, and mounting instructions, have students refer to Lesson 2 for information.
4. Present students with both scoring guides (A and B) and instruct them to fill out Scoring Guide B with the name of each insect they collect. Have students turn in Scoring Guide B along with their collection and explanations.
5. Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.

**Entomology
Student Handout**

1. You will create an insect collection of 30 insects found in Missouri.
2. As part of the collection, you will provide explanations for each insect.
 - a. The explanations will include the following:
 - ☐ Name of the insect
 - ☐ Life cycle
 - ☐ Main food source
 - ☐ Control methods
 - b. You will need to use outside sources to find information.
 - c. You may not use the source information word for word and must provide a complete bibliography of the sources with your collection.
3. For catching, preserving, and mounting instructions, refer to Lesson 2 for information.
4. You will be given two scoring guides (A and B) and instructed to fill out Scoring Guide B with the name of each insect you collect. When complete, give Scoring Guide B to your instructor along with your collection and explanations.
5. Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.

Agricultural Science II

Entomology Scoring Guide A

Name _____

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Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Presentation of Insect Collection	<input type="checkbox"/> Organized <input type="checkbox"/> Neat <input type="checkbox"/> Correct materials used <input type="checkbox"/> Correct display techniques used	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Content of Explanations	<input type="checkbox"/> Information for all insects <input type="checkbox"/> Covers all areas required <input type="checkbox"/> Well organized <input type="checkbox"/> Neat	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Technical Considerations for Explanations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
TOTAL								/40 pts.

Score from Scoring Guide B

/60 pts.

Final Assessment Total _____/100 pts.

Comments:

**Entomology
Scoring Guide B****Name:** _____

Note to student: Fill out this form with the names of the insects in your collection and return it to the instructor along with your collection and explanations.

Insect Name	Number of Points Given (2 points per insect)
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Total number of insects_____ **Total number of points**_____

