

# Title: Insects in the Net

**Curriculum: Life Science**

Grade Level Span: 6-8

Purpose: Students will use computer software programs to produce projects relating to insects.

Description: Students will do a field study of insects. Students will analyze and quantify data from the insect collection. Students will choose 5 insect orders to research the characteristics, taxonomy, adaptation, life cycle and habitat. Students will present their research to the class.

Activities	Curriculum Standards	NETS for Students
<b>Students will do a field study on insects by collecting insects around the school and at home.</b>	5-8 SCI C1	
<b>Proper techniques for preserving and how to curate the insect collection will be demonstrated and practiced in the classroom.</b>		
<b>Demonstrate and practice the use of field guides, Internet classification keys and dichotomous keys to classify insects.</b>		4, 8
<b>Students classify their insect collection.</b>	5-8 SCI C5	4
<b>Students choose five orders of insects to research on the Web and through library sources. (habitat, feeding patterns, appearance, life cycle, reproduction, behavior)</b>	5-8 SCI C5 5-8 SCI C2 5-8 SCI C3	3, 4, 8, 10

<b>Based on their research students will analyze their collection data for patterns.</b>	5-8 SCI C4	4, 9
<b>After research and data analysis students will construct a multi-media presentation linking their data to their researched insect orders.</b>	5-8 SCI G2 5-8 SCI E1	4, 5, 6, 7, 8, 9

## Tools and Resources

### **Hardware:**

Insect collecting nets  
 Plastic jars  
 Nail polish remover (non acetone)  
 Cotton balls  
 Pins  
 Field Guides to insects  
 Dichotomous keys on insects

### **Software:**

Graphing software (e.g. Appleworks or Excel)  
 Presentation software (e.g. PowerPoint, Claris slideshow or Hyperstudio)

### **Web Sites:**

1. Tiger Beetle World  
<http://members.aol.com/YESedu/home.html>
2. Insects on WWW  
[http://www.isis.vt.edu/~fanjun/text/Link\\_index.html](http://www.isis.vt.edu/~fanjun/text/Link_index.html)
3. Dragonflies and Damselflies

<http://www.hanslope.demon.co.uk/dragonfly/index.htm>

4. Entomology Index: K-12 Educators' Recommended Sites  
[http://www.ent.iastate.edu/List/k-12\\_educator\\_resources.html](http://www.ent.iastate.edu/List/k-12_educator_resources.html)

5. University of Kentucky Department of Entomology  
<http://www.uky.edu/Agriculture/Entomology/ythfacts/entyouth.htm>

6. Entomology on the World-Wide Web (Colorado State University)  
<http://www.colostate.edu/Depts/Entomology/>

Ward's Scientific catalog

<http://www.wardsci.com/>

## Assessment

Insect collections can be evaluated based on criteria developed by instructor. (maximum number of orders represented, curation of insects, labeling, classification, neatness)

Multimedia projects can be scored on a rubric based on criteria developed by instructor.

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## Personal Account

**Use the plastic collecting jars instead of glass because they are frequently dropped and broken during collection.**

**Students who object to the killing jars (lullaby chamber) can simulate onset of winter by freezing insects.**

**Instructors may assign insect collection as a summer homework activity to save time in the fall.**

**Supplies for insect collection and curation can be found in science catalogs such as Wards Scientific**

**Insect collection nets can be made by students in class, using a wire hanger, a dowel rod and netting.**

**The multi-media presentation might be fun to do as a new cast. (sports: grasshopper jumps, weather: cricket chirping)**

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