

# Learning Activity Template

Title: Insect Keys

Curriculum: Science

Grade-Level Span: 7<sup>th</sup>-12<sup>th</sup> Grade

## PURPOSE:

To familiarize students with the use of dichotomous keys to identify common insect orders found in our local area and to understand the relationships of insects with humans.

## DESCRIPTION:

Students will collect local insect species, design a dichotomous key to identify the species, and use a variety of technology sources to display information including insect diversity and biological relationships with other organisms.

ACTIVITIES	CURRICULUM STANDARDS	NETS PERFORMANCE INDICATORS
Collect, classify, and digitize pictures of specimens	IV: B, C, E	1, 2
Create a dichotomous key using word processing programs	IV: B, C, E	1, 2
Research insects, humans, and their interrelationships with the environment	IV: B, C, E	1, 2, 5
Design and produce an informational website on insect orders.	IV: B, C, E	1, 2, 3, 4, 5, 6

## TOOLS AND RESOURCES:

Key Guides to Insects – CD ROM or books

Classroom computers and laptop carts

Word processing program - Microsoft Word

Presentation software - PowerPoint

Digital Camera and Downloading Software

Websites:

<http://www.isd361.k12.mn.us/schools/fhs/lmc/index.shtml>

[www.forestryimages.org](http://www.forestryimages.org)

<http://entowww.tamu.edu/fieldguide/orders.htm>

[www.brainpop.com](http://www.brainpop.com)

**ASSESSMENT:**

FACET	EXPECTED ACTION	RESULT OF ACTION
Explain Interpret Apply	Students will apply knowledge of insect characteristics and dichotomous key use to classify insect specimens and create their own dichotomous key.	Quality work Mediocre work Acceptable work
Perspective Empathize Self-knowledge	Students will produce an information-based website that incorporates knowledge of insect characteristics, relationships, and importance in the biological world.	Quality work Mediocre work Acceptable work

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**COMMENTS:**

This project has previously been completed by seventh grade students without the technology aspects. Students will be much more excited about displaying their insect information to other audiences. Upper level students would also be able to perform this project with more details and ethical issue discussions.

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