

OVERVIEW

INSECTS



GOALS

The **Insects Module** provides experiences that heighten students’ awareness of the diversity of animal forms. They come to know firsthand the life sequences of a number of insects. In each investigation an insect is introduced, and students observe structures and behaviors, discuss their findings, and ask questions. Students observe life cycles of insects and compare the stages of metamorphosis exhibited by each species.

FOSS EXPECTS STUDENTS TO

- Develop a curiosity and interest in insects and a respect for them as living things.
- Experience some of the great diversity of forms in the animal kingdom.
- Become familiar with some of the life sequences that different types of insects exhibit (simple and complete metamorphosis).
- Observe the similarities and differences in the larvae, pupae, and adults of insects that go through complete metamorphosis.
- Observe the behaviors of insects at different stages of their life cycle.
- Provide for the needs of insects (air, water, food, and space).
- Acquire the vocabulary associated with insect life.

OVERVIEW CONTENTS

Goals	1
FOSS and National Standards	2
Science Background	3
Integrating the Curriculum	5
Science for Young Children	6
Organizing the Classroom	8
Assessing Progress	10
FOSS for All Students	11
The FOSS Teacher Guide Organization	12
The FOSS Investigation Folio Organization	13
Scheduling the Insects Module	14
Safety in the Classroom	16
Insects Module Matrix	18
FOSS Staff	20

Language Extension

- Read *Lifetimes*.

Math Extensions

- Two problems to solve.

Science Extensions

- Bring insects to class.
- Start a time line.
- Guess when the larvae will pupate.
- Investigate ladybugs.

- *So Many Kinds, So Many Places*

The student sheet called *News Flash!* has students introducing their new classroom insects as they come into the class and writing three observations or facts they have discovered.

Language Extension

- Use waxworms for paragraph topics.

Math Extension

- Use a Venn diagram.

Science Extensions

- Start a waxworm time line.
- Look for moths.

Students provide the second installment of *News Flash!* and keep families updated on their insects' lives.

Art Extension

- Color pictures of bugs.

Math Extensions

- Two problems to solve.

Science Extensions

- Start a milkweed bug time line.
- Discuss life cycle.
- Look for milkweed bugs in the wild.

- *Insect Shapes and Colors*

Students search for insects in the local environment. Suggestions for safely collecting, caring for, and observing insects found in the wild are provided.

Math Extension

- One problem to solve.

Science Extensions

- Start a silkworm time line.
- Look inside a cocoon.

- *What Makes an Insect an Insect?*

Students look for evidence of insects and other small animals (spider webs, holes in a plant leaf, and so forth).

Art Extension

- Reconstruct a butterfly.

Math Extensions

- Two symmetry problems to solve.
- Use a Venn diagram.

Science Extensions

- Hold a butterfly.
- Start a painted lady time line.
- Raise local larvae.

- *Insect Life Cycles*
- *Life Goes Around*

Students create an imaginary insect with craft materials. They create the life history of their unique insect species.

Math Extension

- One graphing problem to solve.

Science Extensions

- Observe ladybugs.
- Observe mantids.
- Raise fruit flies.
- Take a field trip.

- *Same But Different*
- *Environment*
- *Variation*

Students take home instructions for a simple, homemade ant farm for small black or carpenter ants.

