Insects
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This fun-filled unit immersed children in writing, poetry, language arts, science, math and social studies. The resources and material presented in this unit have been selected to help children gain a better understanding of insects. This unit has been designed for K-2 grade students. In addition, students will experience working cooperatively, being considerate of others, and taking into consideration another's point of view. A variety of teaching strategies such as cooperative learning, hands-on experiences, and child-centered assessment are integrated throughout the unit.

Language Arts/Cinquain Poem

Standards:
- F5 Analyze selections of fiction, nonfiction and poetry for their literary elements such as character, setting, plot sequence of events and organization of text.
- PO 3. Describe structural elements of poetry (e.g. rhyme, rhythm, repetition)

Mathematics - Hungry Ants

Standards:
- IM-F3 understands the meaning for and application of the operations of addition, subtraction, multiplication and division.
  - PO 1. Demonstrate with models the process used in addition
  - PO 2. Demonstrate with models the process used in subtraction
  - PO 6. Select appropriate operations to solve word problems
  - PO 7. Solve word problems using the appropriate operations

Science - Life Cycle of an Ant

Standards
- Life Science
  - Students understand the characteristics of living things, the diversity of life and how organisms change over terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment.
  - 4SC-F2. Trace the life cycles of various organisms.
    - PO1. Identify the stages in a life cycle.
    - PO2. Record life cycle stages in sequence.
Social Studies - Ladybug

Standards:

- #3 GEOGRAPHY - Students are able to analyze locations, regions and spatial connections, recognizing the natural and cultural processes that impact the way in which people and societies live and interact with each other and their environment.

Poetry

Language Arts
by Josefina Zaragosa

Introduction
The lesson will introduce students to poetry, as well as help them develop language and a further understanding of an insect's environment.

Outcomes
Students will become familiar with cinquain poem format; they will also practice public speaking skills.

Standards

- F5 Analyze selections of fiction, nonfiction and poetry for their literary elements such as character, setting, plot sequence of events and organization of text.
- PO 3. Describe structural elements of poetry (e.g. rhyme, rhythm, repetition)

Resources And Materials

- “Writing Poetry with children,” by Jo Ellen Moore
- Pictures of different kinds of insects
- Pencils
- Crayons
- Cinquain format writing paper
- White construction paper.

Process

- Students will select their favorite insect.
- Brainstorm to develop a list of four-syllable words or phrases about an insect.
- Brainstorm to develop a list of six-syllable words or phrases about the insect.
- Brainstorm to develop a list of eight-syllable words or phrases about the insect.
- Brainstorm to create a list of two-syllable words or phrases that refers back to the title.
- Students create their own cinquain using the lists created by the class.
- Once students have sufficient group practice, students will write an independent cinquain.
- Students will also illustrate their poem once they have finished writing it.
Assessment
Students will be assessed on how closely they follow the cinquain poem format, the illustration of their chosen insect, and the reading of the poem in front of classmates, and on neatness.

Extensions / Modifications
For beginning writers, it is better to write a couple of class poems first. The syllable format may also be modified to fit the level of your students. As an extension, students may choose their five favorite insects to create their own insect poem book. The following may be used as a guide for students to follow when writing:

**Write a Cinquian**
1. Decide on your one-word title.
2. Think of two-word phrases that describe your topic. Select the phrase you like best.
3. Think of three-word phrases that describe an action related to your topic. Choose the phrase you like best.
4. Think of four-word phrases that describe a feeling related to your topic. Choose the phrase you like best.
5. Think of one word that refers back to your topic.

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**Life Cycle of an Ant**

**Science**

*by Anabel Medina*

**Introduction**
In this lesson students will learn about the four stages of the life cycle of an ant. After completing the lesson, students will learn that the four stages are metamorphic changes or cycle of an ant. Students will do this lesson in order for them to gain a better understanding about ants. Students will also work cooperatively by sharing ideas, working together, completing hands-on activities.

**Outcomes**
Students will learn the life cycle of an ant.

**Standards**
- Life Science
  - Students understand the characteristics of living things, the diversity of life and how organisms change in terms of biological adaptation and genetics. Students will understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment.
- 4SC-F2. Trace the life cycles of various organisms.
  - PO1. Identify the stages in a life cycle.
  - PO2. Record life cycle stages in sequence.
Resources And Materials

- “Ant Cities” by Arthur Dorros
- Thematic Unit-Ants by Teacher Created Materials
- 2 paper plates
- Ruler
- 1 brad fastener
- Markers
- Pencil
- Scissors

Process

- The teacher will read with the students the book entitled, “Ant Cities” by Arthur Dorros. The teacher will focus on the four stages of the life cycle of an ant (egg, larva, pupa, adult). These four stages are metamorphic changes through which an ant must pass.
- Students will work in groups to research the different stages. They will share their findings and will create metamorphosis wheels.

Assessment

The teacher will evaluate the students' learning by having them participate in a group. She will also evaluate students by observing and grading their work. Finally, she will evaluate students by having them answer questions about the life cycle of an ant.

Extensions / Modifications

This lesson can be expanded. For example, have students bring different kinds of foods to class and allow them to determine which foods ants are drawn to. Another example, have students find out about the different kinds of ants, where they live (habitat), what they eat, what they use to protect themselves, and who are their enemies. Students may also expand their knowledge about insects by examining the life cycle of other insects.