



CREATE AN INSECT

Creative Module #4 - Write & Draw

SKILLS

Creative writing, research, reading, understanding the parts of an insect

OBJECTIVE

To demonstrate their knowledge of insects and their characteristics, each student will create a unique insect. Students will write descriptive paragraphs about their creations, noting any special features or adaptations.

MATERIALS

- 4 "Insect Equipment" handout for each student
- 4 "Create an Insect" activity sheet for each student
- 4 paper and pencil to begin, then anything goes!
- 4 pictures of insects and other arthropods (optional)
- 4 insect resources (see attached bibliography)

BACKGROUND

Insects have a hard outer shell (or skeleton) we call an exoskeleton. Their bodies are divided into three main sections (the head, thorax, and abdomen). They have 6 legs (3 pairs), 2 antennae, and 2 eyes. Many insects have wings. Some insects have simple eyes, although many have compound eyes. Examples of insects are: Beetles, ants, flies, mantis, and grasshoppers. Insects belong to a group of animals called arthropods. Some arthropods don't have what it takes to be an insect. Crustaceans (crabs, lobsters and shrimp), arachnids (spiders, scorpions, and mites), millipedes, and centipedes are arthropods but they are NOT insects.

Insects have adapted in certain ways to increase their chances of survival in the wild. An adaptation is a special skill or characteristic that helps an animal survive in its environment. An adaptation may help an animal hunt, hide, or attract a mate. In this creative module students will explore the primary rules of what an insect is and the adaptations that make each insect unique as they create their own special insect.

LESSON

Pass out the "Insect Equipment" handout to each student. Discuss the standard and optional equipment that make up insects. Share information about other arthropods with students. Display the pictures of insects to the class. Ask them to identify the insects and point out the "standard" or "optional" equipment of each insect.

SUBJECTS:

art
language arts
science

TIME:

Preparation: 10 minutes
Teaching: 40 minutes
Evaluation: 2 minutes/student

VOCABULARY:

temperature
camouflage
adaptation
environment
survival
carnivore
herbivore
omnivore
nocturnal
diet
landforms

MORE IDEAS:

Modifications and more ideas are located at the end of this lesson.

MORE INFORMATION:

www.orkin.com
www.mnh.si.edu
www.insectsafari.com





When students seem familiar with the primary rules of what an insect is introduce the concept of adaptation. Ask students to identify various characteristics that animals (especially insects) can use to help them hunt, hide, or attract a mate. Identify adaptations on the pictures of insects used in the previous part of the discussion. Allow students time to look through the resources about insects to discover other kinds of adaptations.

Distribute the "Create An Insect" activity sheet. Tell students their assignment will be to use their creative skills to design a new insect. Their insects must include all the standard parts of an insect and may include some optional parts.

Using the questions in the handout, have students think of adaptations their insects might have. The adaptations will be determined by the answers to the questions on the activity sheet. For example, if the student's imaginary insect lives in the arctic, it will have adaptations that help it survive the cold.

After they have completed their activity sheets have students write a rough draft of a paragraph describing their insects on the back of their activity sheets. They may also want to sketch pictures of what their imaginary insects look like. When students are ready have them create finished drawings of their insects (you might want to make various art supplies available at this point) and final versions of their paragraphs. Display the drawings and paragraphs on a class bulletin board about insects.

EVALUATION

Review each student's activity sheet, paragraph, and drawing. Make sure each student created an insect that has all the standard equipment of an insect and has adaptations suited to its environment.

MORE IDEAS

Allow students to make models of their insects using materials such as clay, plaster, wood, papier maché, pipe cleaners, and tissue paper.

Have students draw or create models of their insects' environment, depicting their homes.

Write creative stories or draw cartoons using their imaginary insects as main characters.

MODIFICATIONS

Beginning:

Have students work through the activity sheet in small groups or with an adult helper. Then, have each student illustrate the insect created by the group.

Advanced:

Have students develop their ideas further by designing a food chain for their insects. Have students include plants that have adapted to their insect's environment in their drawings. (Also see More Ideas)

NATIONAL SCIENCE EDUCATION STANDARDS

The student should develop the ability to understand and to do scientific inquiry.

The student should develop an understanding of the characteristics of organisms and their environments.





CREATE AN INSECT



NAME DATE

1. This is my insect's habitat (where my insect lives):

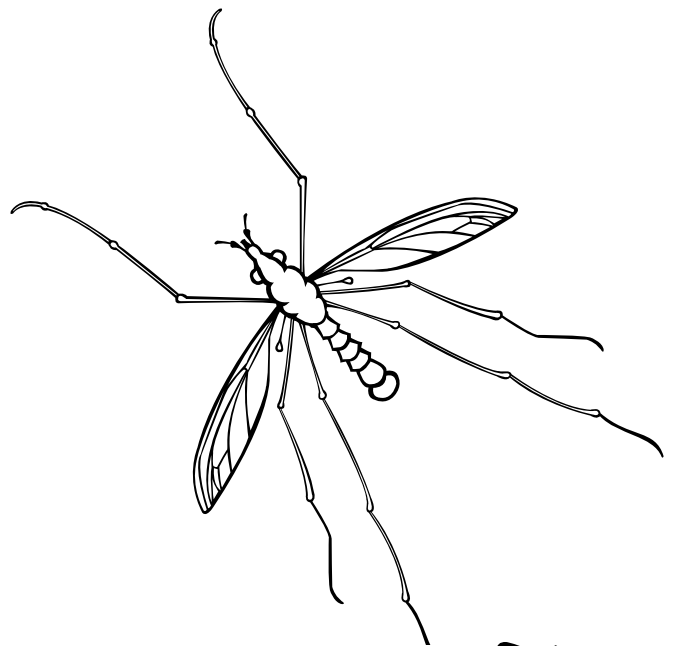
2. This is how my insect moves:

3. This is what my insect eats:

4. This is how my insect eats:

5. My insect is eaten by:

6. My insect avoids its predators by:

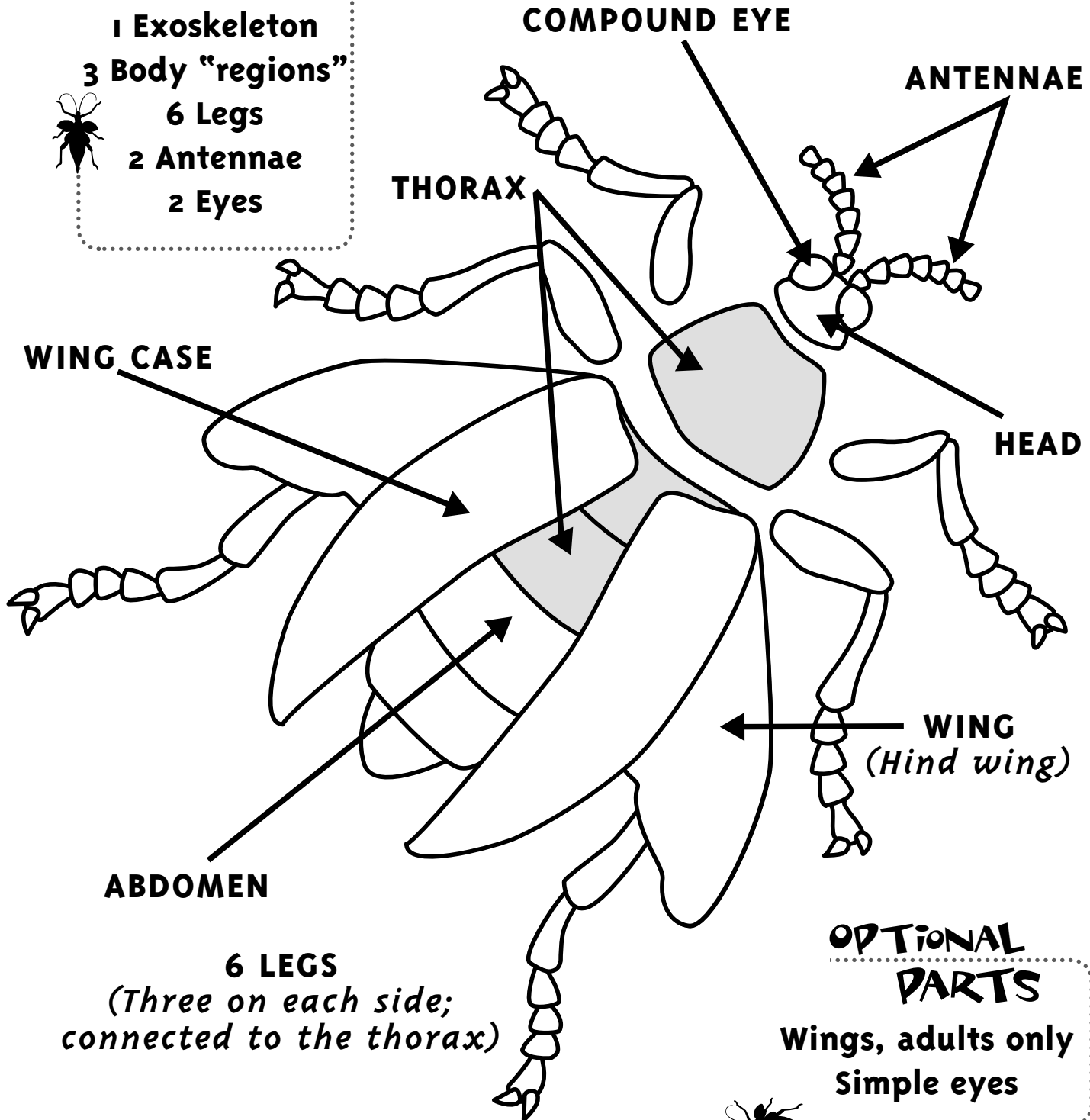


INSECT EQUIPMENT

Handout

STANDARD PARTS

- 1 Exoskeleton
- 3 Body "regions"
- 6 Legs
- 2 Antennae
- 2 Eyes



OPTIONAL PARTS

- Wings, adults only
- Simple eyes

