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### *How do insects use and their mouths and antennae?*

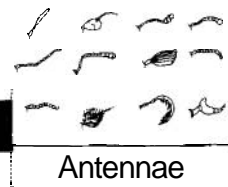
#### **Insect Concepts:**

- Insects' antennae are most frequently used to smell and feel.
- Most insects have two segmented antennae on their heads, located between their eyes.
- Antennae have developed into many different shapes, including feathery, twisted, and cone-shaped.
- Some insects secrete chemical signals called pheromones that are sensed by the antennae of insects of the same species.
- Insects have two main types of mouthparts – mandibles and maxillae. These have adapted individually into many variations, and some orders of insects have combinations of both.
- Mouthparts may be used for piercing, chewing, siphoning, holding, and tearing. Wood-eaters make up the largest group of insects.

**Vocabulary:** antennae smell taste touch \*olfactory nerves (ol FAK to ree)

\*mandibles \*maxillae (max IL ee) \*labium (LAY bee um)

*Read: Lots of Science Library Book #4.*



#### **Insect Mouth and Antennae – Graphic Organizer**

**Focus Skill:** explaining functions of parts

**Paper Handouts:** 2 pieces of paper, 4.25" x 5.5" (This is equivalent to 1/4 of an 8.5" x 11" sheet of paper.)  
a copy of Graphics 4A-B *All About Insects Graphic Organizer*

**Graphic Organizer:** Make Matchbooks out of the two pieces of paper. Fold the bottom tab up 1/2 inch. Cut out and color Graphics 4A-B. Glue one on the front of each Matchbook. Label the tabs *Antennae* and *Mouth* accordingly. Open the Antennae Matchbook.

- Draw pictures of one or more antennae types.
- On the top section, complete . On the bottom section, write clue words about the uses of antennae: *smell, taste, and touch.*
- Open the Matchbook and on the top section, sketch a pair of antennae showing the three parts and label them. On the bottom section, explain the uses of antennae, using your vocabulary words.

Open the Mouth Matchbook.

- Draw a picture of an insect's mouth.
- On the top section, complete . On the bottom section, write clue words about insects' mouths: *pierce, chew, sponge.*
- On the front of the Matchbook, label the mouthparts. Open the Matchbook and on the top section, describe the different mouthparts and their functions. On the bottom section, include an example of an insect with each type of mouth.

