

Arthropod Mouth Parts and Food

Scientific Background

Arthropods have mouthparts that are modified for the type of food they consume. These are some arthropod mouthpart types and the foods that those bugs eat.

- Coiled proboscis – used to suck nectar from flowers. Found in adult butterflies and moths.
- Chewing mandibles – large jaws adapted for chewing or grazing. Common in beetles, cockroaches, mantids, and stick insects.
- Fangs – these pierce the prey and inject it with poison. The tarantula has downward-pointing fangs.
- Piercing and sucking – needle-like mouthparts modified to pierce food and suck up liquids. Found in mosquitoes and the giant water bug.
- Reduced – some insects do not eat as adults because their mouthparts are reduced. The Luna moth has this type of mouthparts.
- Sponging – a flattened, round mouthpart, used for lapping or sponging up liquefied food. Common to flies.

Vocabulary

- | | |
|-------------|-----------------------|
| ▪ chewing | ▪ coiled |
| ▪ fangs | ▪ jaws |
| ▪ mandibles | ▪ nectar |
| ▪ pierce | ▪ poison |
| ▪ prey | ▪ proboscis |
| ▪ reduced | ▪ sponging mouthparts |
| ▪ suck | ▪ |

*Vocabulary definitions can be found in the **Backyard Bugs** Glossary.*

Thinking Question

What do the mouthparts of other animals, such as goldfish, whales, and sharks look like? How do they work? What do these animals eat?

Exploratory and Extension Activities

Additional Exploratory and Extension activities are available in the Backyard Bugs Teacher’s Guide.

Origami

Investigate the ancient Japanese art of origami. Paper folding steps for bugs can be found in *Origami Insects and Their Kin* (Dover Publications, 1995, ISBN: 0486286029). Start by creating an origami butterfly. Follow the paper folding steps at www.paperfolding.com/diagrams/.







Eating Bugs

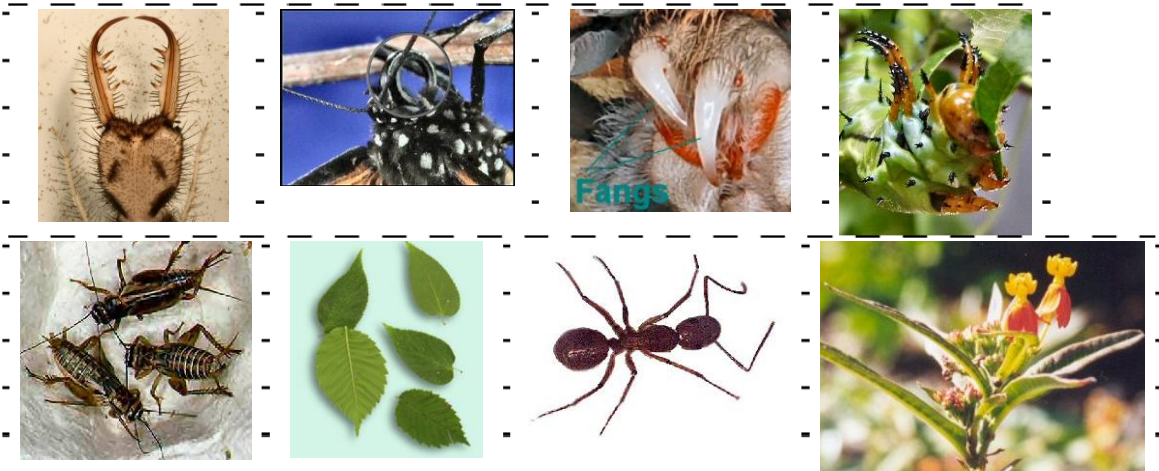
Visit http://stalkingthewild.com/stw/why_not_bugs.html

Lead students in a discussion about eating bugs and insects. Ask them to discuss the differences between cultures and how groups of people feel about eating bugs.

Name: _____









Arthropod Mouth Parts and Food

Cut out the pictures of the arthropod mouthparts and food below. Paste them next to the correct arthropod.		
Arthropod	Mouthpart	Food
		
		
		The adult Luna moth does not eat. It has no mouthparts.
		
		



Answer Key

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		<p>The adult Luna moth does not eat. It has no mouthparts.</p>
