

Name _____

Bug Buffet: Exploring the Diets of Insects

Open-Ended Response Answer Key

1. Bugs employ various feeding strategies to obtain their food. For example, herbivorous bugs like caterpillars use chewing mouthparts to consume plant matter, while carnivorous bugs like praying mantises are active hunters that capture other insects.
2. Detritivorous bugs, such as dung beetles and earthworms, play critical roles in ecosystems by breaking down dead plant and animal material, facilitating nutrient cycling and decomposition processes. These bugs help to recycle nutrients and maintain soil fertility.
3. Bugs with chewing mouthparts, like caterpillars, consume plant matter by chewing and ingesting leaves, stems, and other plant parts. In contrast, bugs with piercing-sucking mouthparts, like mosquitoes, use specialized mouthparts to puncture the skin of their hosts and feed on blood.
4. Herbivorous bugs primarily consume plant matter, while carnivorous bugs feed on other insects and spiders. Omnivorous bugs have a varied diet, consuming both plant and animal matter. Each type of bug plays different roles in ecosystems, contributing to nutrient cycling and energy flow.

