

Name \_\_\_\_\_

## Unveiling the World of Bugs: Exploring Diversity and Common Examples

### Open-Ended Response Answer Key

1. Bugs play crucial roles in ecosystems. As predators, they help control pest populations and maintain ecological balance. For example, assassin bugs prey on other insects, while also serving as food for birds and other animals.
2. Aphids are considered agricultural pests because they feed on plant sap, which can weaken plants and reduce crop yields. The economic impact of aphids includes crop damage, decreased quality of harvested crops, and the need for pest control measures such as insecticides.
3. One adaptation of bugs is their specialized mouthparts, which are adapted for piercing and sucking, allowing them to obtain fluids from plants, animals, or other insects. This adaptation helps bugs obtain nutrients necessary for survival and reproduction, contributing to their success in diverse habitats.
4. Stink bugs primarily feed on plant sap using their piercing-sucking mouthparts, while water striders prey on small insects and other organisms that fall onto the water's surface. Stink bugs are terrestrial insects found in gardens and agricultural fields, while water striders are adapted for life on the surface of freshwater bodies such as ponds and streams.

