Name(s): Answer Key

Date: _____

Team Number: _____

Created by **Navigator**

Part I - Identification

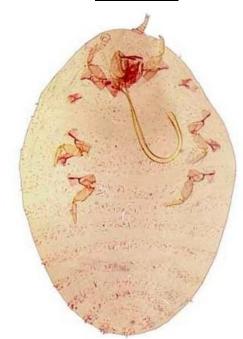
1. a) Order: Plecoptera

b) Common Name: Stoneflies



2. a) Order: <u>Hemiptera</u>b) Family: <u>Dactylopiidae</u>

c) Common Name: Scale insects



3. a) Order: <u>Diplura</u>

b) Common Name: *Diplurans, two-pronged bristletails*



4. Order: <u>Collembola</u> Family: <u>Lycidae</u>

Common Name: *Net-winged beetles*



5. Order: <u>Diptera</u> Family: <u>Muscidae</u>

Common Name: *Horseflies*



6. Order: <u>Ephemeroptera</u> Common Name: <u>Mayflies</u>



7. Order: <u>Mecoptera</u> Family: <u>Panorpidae</u>

Common Name: <u>Common scorpionflies</u>



8. Order: <u>Anoplura</u> Common Name: <u>Sucking lice</u>



<u>Part II</u> -

Name the scientific name and type of antennae that goes with each insect. (*Note: antenna types may be repeated.*)

Dragonflies:

- 9. Scientific name- *Odonata*
- 10. Antenna type- *Setaceous*

Ground beetles:

- 11. Scientific name of the order- *Coleoptera*
- 12. Scientific name of the family- *Carabidae*
- 13. Antenna type- *Filiform*

Termites:

- 14. Scientific name- *Isoptera*
- 15. Antenna type- *Moniliform*

Click beetles:

- 16. Scientific name of the family- *Elateridae*
- 17. Antenna type- *Serrate*

Butterflies:

- 18. Scientific name- *Lepidoptera*
- 19. Antenna type- *Capitate*

Mosquitoes:

- 20. Scientific name of the order- *Diptera*
- 21. Scientific name of the family- *Culicidae*
- 22. Antenna type- Plumose

Ants:

- 23. Scientific name of the order- *Hymenoptera*
- 24. Scientific name of the family- Formicidae
- 25. Antenna type- *Geniculate*

Cockroaches:

- 26. Scientific name- *Blattodea*
- 27. Antenna type- *Filiform*

House Flies:

- 28. Scientific name of the family- *Muscidae*
- 29. Antenna type- *Aristate*

Define each word. (Answer is something along the lines of the definition given here)

- 30. Spermatophore: <u>encapsulated sperm within a water-tight lipoprotein shell</u> <u>secreted by the male's accessory glands; protects sperm from desiccation</u> during external fertilization
- 31. Alimentary canal: <u>tube-like enclosure running lengthwise through body from mouth to anus where food processing occurs—found in a complete digestive system</u>

Eusocial insect characteristics (cover all four characteristics):

- 32. *Share a common nest site*
- 33. Individuals of the same species cooperate in caring for the young
- 34. <u>Reproductive division of labor— sterile (or less fecund) individuals work for the benefit of a few reproductive individuals</u>
- 35. <u>Overlap of generations— offspring contribute to colony labor while their parents are still alive</u>
- 36. Cross resistance: <u>when a population develops a form of resistance that protects</u> <u>it from compounds in more than one chemical class—may produce a population that can no longer be controlled with chemical insecticides.</u>
- 37. Tagma: <u>a specialized grouping of multiple segments or metameres into a</u> <u>coherently functional morphological unit. Familiar examples are the head, the thorax, and the abdomen of insects</u>