Leafhopper Lab, 3--4 hour lab
Related TEKS (revised for 2010-2011), 6th grade and up

112.18: Science, Grade 6

b)2. Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations. The student is expected to:

C. Collect and record data using…means such as labeled drawings and writing…

E. Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

b)4. Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:

A. Use appropriate tools to collect, record, and analyze information, including journals/notebooks, … microscopes… and other equipment.

b)12. Organisms and environments. The student knows all organisms are classified into Domains and Kingdoms. Organisms within these taxonomic groups share similar characteristics which allow them to interact with the living and nonliving parts of their ecosystem. The student is expected to:

E. Describe biotic and abiotic parts of an ecosystem in which organisms interact.

112.19: Science, Grade 7

b)2. Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations. The student is expected to:

C. Collect and record data using…qualitative means such as labeled drawings and writing…

E. Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

b)4. Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:

A. Use appropriate tools to collect, record, and analyze information, including …hand lenses, …Petri dishes, … microscopes, …collecting nets, insect traps, journals/notebooks, and other equipment.

b) 10. Organisms and environments. The student knows that there is a relationship between organisms and the environment. The student is expected to:

A. Observe and describe how different environments, including microhabitats,…support different varieties of organisms.

B. Describe how biodiversity contributes to the sustainability of an ecosystem.

b)11. Organisms and environments. The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations. The student is expected to:

A. Examine organisms or their structures such as …insects and use dichotomous keys for identification.

112.20: Science, Grade 8

b)2. Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations. The student is expected to:

C. Collect and record data using…qualitative means such as labeled drawings and writing...

E. Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

b)4. Scientific investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry. The student is expected to:

A. Use appropriate tools to collect, record, and analyze information, including lab journals/notebooks, …microscopes…and other equipment.

b)11. Organisms and environments. The student knows that interdependence occurs among living systems and the environment and that human activities can affect these systems. The student is expected to:

A. Describe producer/consumer, predator/prey, and parasite/host relationships as they occur in food webs within…terrestrial ecosystems.