Habitat Stats
4th grade

Overview
Many arthropods are found around the schoolyard. Some arthropods in the schoolyard may have
very specific requirements that are found in some areas of the schoolyard and not in others. This
could lead to different number of species living in different habitats. For example, a particular kind
of beetle may be found near creosote bushes but not in the open or under any other kind of shrub.
This activity will allow students to examine these relationships. Students use pitfall traps to
investigate the types and numbers of ground arthropods in two different habitats in the schoolyard.

Vocabulary
- **arthropod** – an invertebrate animal of the large phylum Arthropoda, such as an insect, spider, or
crustacean having an exoskeleton
- **habitat** - the natural home or environment of an animal, plant, or other organism

NM Science Standards Addressed
1-1-1-1 Use instruments to perform investigations (e.g., timers, balances) and communicate findings.
1-1-1-2 Differentiate observation from interpretation and understand that a scientific explanation comes
in part from what is observed and in part from how the observation is interpreted.
1-1-1-3 Conduct multiple trials to test a prediction, draw logical conclusions, and construct and
interpret graphs from measurements.
1-1-1-4 Collect data in an investigation using multiple techniques, including control groups, and
analyze those data to determine what other investigations could be conducted to validate
findings.
1-1-2-1 Communicate ideas and present findings about scientific investigations that are open to critique
from others.
1-1-2-2 Describe how scientific investigations may differ from one another (e.g., observations of
nature, measurements of things changing over time).
1-1-2-3 Understand how data are used to explain how a simple system functions (e.g., a thermometer to
measure heat loss as water cools).
1-1-3-1 Conduct multiple trials using simple mathematical techniques to make and test predictions.
1-1-3-2 Use mathematical equations to formulate and justify predictions based on cause-and-effect
relationships.
1-1-3-4 Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of
the density of materials that will or will not float in water to the density of water).
2-2-1-1 Explain that different living organisms have distinctive structures and body systems that serve
specific functions (e.g., walking, flying, swimming).
2-2-2-1 Know that in any particular environment some kinds of plants and animals survive well, some
survive less well, and others cannot survive at all.
3-1-1-4 Know that both men and women of all races and social backgrounds choose science as a career.

CCSS Language Arts Standards Addressed
SL.4.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
SL.4.1.C Pose and respond to specific questions to clarify or follow up on information, and make
comments that contribute to the discussion and link to the remarks of others.

Date: _______________________
Asombro staff: ______________________