Name of Exhibit: Insects

Description: For insects, HSC has live cockroaches and walking sticks (also some mounted specimens). Most of the animals we have at HSC are vertebrates, their most recent common ancestry with insects is over 500 million years ago. They have lots of unique physical features and characteristics.

For all ages.

MN SCIENCE Grad Stand/Strand/Sub-strand: Number####:

0L 1.2.1.2, 0P 2.1.1.1, 0L 2.1.1.3, 0L 3.1.1.1
1L 1.1.1.1, 1L 3.1.1.1, 1L 3.2.2.2, 1E 4.1.1.1, 1L 4.2.1.2
2L 3.2.2.1, 2L 4.1.1.1
3L 3.1.1.2, 3L 3.2.1.1, 3L 4.1.1.1, 3L 4.2.1.1
4L 4.1.1.1
5L 4.1.2.1
7L 2.1.1.1, 7L 2.2.1.1, 7L 3.2.1.1, 7L 4.1.1.2, 7L 4.1.2.1

Grade Level(s): Kindergarten through 7th Grades

Content Area(s): Life Science, Earth Science

Learning Target(s):

1. I can ask questions from observations about the similarities and differences found in insects and other living things.
2. I can explain how patterns in the behavior of insects and their offspring help offspring survive.
3. I can explain, using evidence, how variations in characteristics among insects (same species) may provide advantages in surviving, finding mates, and reproducing.
4. I can apply my knowledge about specific HSC cockroaches and walking sticks to explain the strategies a variety of animals use to survive.
5. I can obtain information from resources to determine that insects have traits inherited from parents and that variations of these traits exist in a group of similar organisms.

Essential Question(s):

1. What differences can you see between insects and other animals? What similarities can you see between two insects and other animals?
2. What human invention mimics cockroach and walking stick characteristics?
3. What do cockroaches and walking sticks do to protect themselves from enemies?
4. How do variations in characteristics among insects (same species) provide advantages?
5. What are strategies cockroaches/walking sticks use to survive? Why are the strategies successful? Why aren't some strategies successful?
6. What variations are the result of inherited traits from parents of insects?

Key Vocabulary in Demo: Insects, Abdomen, Antennae, Biome, Camouflage, Cold-Blooded vs Warm-Blooded, Habitat, Head, Herbivore, Life Cycle, Nocturnal, Predator vs Prey, Thorax, Vertebrates vs Invertebrates

Prerequisite Terms: Adaptation, Advantage, Behavior, Characteristics, Differences, Function, Lineage, Mimic, Model, Observation, Patterns, Protect, Range, Relationship, Similarities, Strategies, Structure, Traits, Variation