Living vs. Nonliving Things

Materials: small shovel, spoon, or stick for digging, container for collecting specimens

Background Information: All living things, also called organisms, have basic characteristics in common. All organisms are made of at least one cell and have some level of cellular organization in which certain parts perform certain functions. Additionally, all living things grow and have the ability to reproduce (make more of their kind) when mature. All organisms also use energy (either created within themself or taken in as food), exchange gases, get rid of waste, and respond to their environment. In order to be classified as a living thing, something must have and do all of these things, otherwise, it is classified as nonliving.

STEM Career Connection: Wildlife biologists study animals and other wildlife, and how they interact with their ecosystems. They study the physical characteristics of animals, animal behaviors, and the impacts humans have on wildlife and natural habitats.


Challenge:
1. Find a small outdoor area to explore. An area the size of a hula hoop is good. You can mark the space with a hula hoop or string if you’d like.
2. Explore the area inside your observation space. What sorts of objects and materials do you see? What items can be classified as living things? What items can be classified as nonliving things?
3. Use a small shovel, spoon, or stick to dig a small hole in the ground of your observation area. What do you find underground? What items can be classified as living things and what items are nonliving?
4. Find a second area to explore. How is this area similar to and different from the first area you investigated?
5. Think about the items you found. How do the living things depend on nonliving things to survive?