

TEACHER GUIDE



LIVING VS NON-LIVING THINGS GRADES K-2

COMMON MISCONCEPTIONS

All creatures eat food in the same way.

Plants require nutrients in a chemical fashion while animals like humans have stomachs that convert living things into the necessary nutrients.

Humans are not animals.

People are mammals, a type of animal. We grow, take in nutrients and reproduce in many of the same ways as other animals.

Animals all reproduce like humans.

Mammals bare their young live, but other animals like birds and reptiles produce eggs and the new organism hatches from the egg.

All living things breathe in the same way.

Respiration is a necessary function for all living things, but it is accomplished in different ways. Mammals breathe through lungs and fish breathe through gills. Plants like trees accomplish respiration through their leaves which may not be apparent to students at this age. Many insects use special holes all over their body for respiration.

All living things move.

Seeing if something moves is often the first impulse for students trying to distinguish if something is living or non-living, however this is not a way to tell. Many non-living things move. Fire moves, water moves, a robot moves, etc.

CHARACTERISTICS OF LIVING AND NON-LIVING THINGS

Everything that surrounds us is either living or non-living. Living things are animals and plants that are alive. All living things grow, need nutrients and reproduce. Non-living things do not show all three of these signs of life. In our lesson, we separate dead things into their own category as something that was once living but is no longer alive. It used to grow, take in nutrients and reproduce, but it does not anymore.

SOME THINGS ARE HARD TO CLASSIFY

While this topic is very basic on the surface, scientists to this day continue to debate the living vs. non-living classification of some things such as viruses. They are made of the same biological substances as people (DNA, protein, etc.), they do grow and reproduce, but they cannot reproduce on their own. For these reasons it is generally accepted that a virus is non-living according to the traditional definition. This depth is not needed for this grade level.

TIPS FOR TEACHERS

Give your students a homework assignment to draw pictures of a living and a non-living thing they observe inside or outside their home.

