

LIVING AND NON-LIVING

When young children begin to explore what makes something a living thing, and what makes something else non-living, there will be many areas of confusion. They may have limited experience with the natural world, a rich imagination, and are just beginning to develop logical thinking. They might come to incorrect conclusions, such as:

- A bird moves and makes noise, and so does a car; both must be living things.
- A seed doesn't do anything (seemingly), but a young plant changes and grows. So, a seed must be non-living.
- A leaf that has fallen off a tree is dead, which also means not alive. This must mean dead leaves are non-living things.
- People need water to live, so water must be a living thing too.
- Wind can be strong, angry, or gentle; wind must be a living thing.

It is important for young children to understand that Living Things:

1. Need water, food, air, space or shelter, and light (for most plants).
2. Grow, develop, change, and die.
3. Are able to reproduce.

When looking for examples, it is helpful to teach children to ask themselves:

"Does it eat or need nutrients to survive?"

"Can it make babies or more of itself?"

"Does it grow and change?"

"Can it die?"

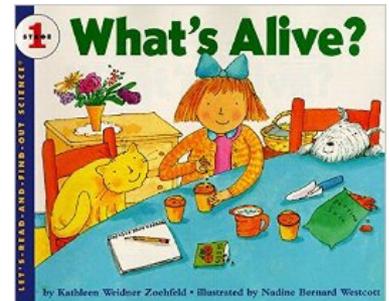
"Did it come from a living thing?"

Phrases such as "once living" and "never living" can further help children differentiate between living and non-living. Older children may be introduced to the word "dormant" to describe seeds or trees in winter.

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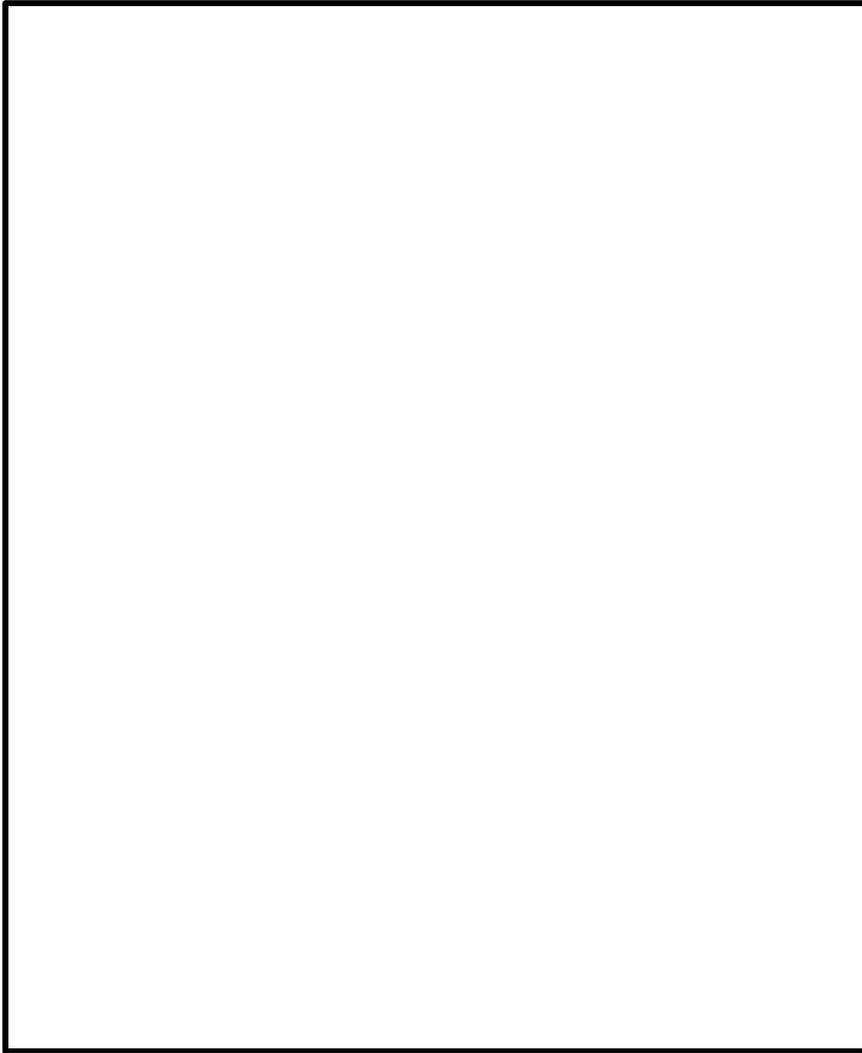
Suggestions for teaching:

- Before searching for examples of living and non-living things, have students sort picture cards and discuss their ideas in small groups.
 - Begin using basic picture cards, such as the ones provided.
 - Several sorts over many days encourages deeper thinking, and allows for the addition of more challenging examples of living and non-living things.
 - Allow for discomfort; don't rush in to tell students the correct answer. Let them explain their thinking.
- A great book to read aloud is What's Alive by Kathleen W. Zoehfeld
- Before coming to the Arboretum, ask students to list examples of living and non-living things they expect to see. Use our website <http://www.arboretum.harvard.edu> to pre-view sections of the landscape.



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Draw and label 5 examples of LIVING THINGS



Draw and label 5 examples of NON-LIVING THINGS

