

What Are Living and Non-living Things?

Definition and Explanation

Our world is full of amazing things! Some are alive, and some are not. Let's learn how to tell the difference.

Living Things: These are things that are alive. They have a life cycle (they are born, they grow, and they die). To be called a living thing, it must have all of the special characteristics of life.

Examples of Living Things:

- A puppy, a tree, a little baby, a fish.



Non-living Things: These are things that are not alive. They were never alive and will never be alive. They do not have the characteristics of life.

Examples of Living Things:

- A rock, a pencil, a toy car, a glass of water.



Key Points and Important Terms

To know if something is living, we can check for 7 key characteristics. Think of them as the "Superpowers of Living Things"!

i. Living things MOVE.

- Animals walk, run, fly, or swim.
- Plants move too! They turn their leaves towards the sun and their roots grow down into the soil.

ii. Living things BREATHE.

- Humans and animals breathe in oxygen. Fish use gills to breathe underwater.
- Plants "breathe" through tiny holes in their leaves.

iii. Living things NEED FOOD (and Water).

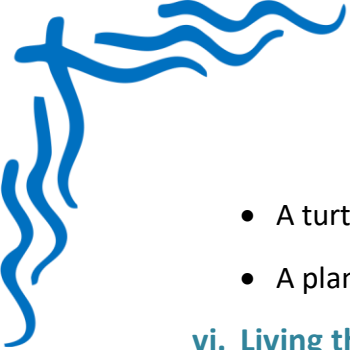
- Animals eat other plants or animals to get energy.
- Plants make their own food using sunlight, water, and air (this is called photosynthesis).

iv. Living things GROW.

- A kitten grows into a cat. A small seed grows into a big tree. A baby grows into an adult.

v. Living things RESPOND to changes.

- If you touch a hot pan, you pull your hand away quickly.



- A turtle pulls into its shell if it senses danger.
- A plant called a "touch-me-not" closes its leaves when touched.

vi. Living things REPRODUCE (make more of their own kind).

- Cats have kittens. Birds lay eggs that hatch into chicks.
- Plants produce seeds that can grow into new plants.

vii. Living things GET RID OF WASTE.

- Your body gets rid of waste when you go to the bathroom.
- Plants also release waste gases from their leaves.

Important Terms:

- **Living:** Something that has all 7 characteristics of life.
- **Non-living:** Something that does not have the characteristics of life.
- **Natural:** A non-living thing that is found in nature and is NOT made by humans (e.g., rock, water, sand).
- **Man-made:** A non-living thing that is made by humans (e.g., chair, book, car).

Detailed Examples with Solutions







Let's look at some examples and decide if they are living or non-living.

Thing	Living or Non-living?	Why? (Does it have the 7 characteristics?)
A Cat	Living	It moves, breathes, eats food, grows from a kitten, responds (purrs when petted), reproduces (has kittens), and gets rid of waste.
A Rock	Non-living	It does not move on its own, breathe, eat, grow, respond, or reproduce. It is a natural non-living thing.
A Tree	Living	It moves (grows towards the sun), breathes (through leaves), makes its own food, grows from a seed, responds (loses leaves in winter), and reproduces (makes seeds).
A Car	Non-living	It moves, but only when a person drives it. It uses fuel, but doesn't "eat" for energy to grow. It does not breathe, grow, reproduce, or respond on its own. It is a man-made non-living thing.

Thing	Living or Non-living?	Why? (Does it have the 7 characteristics?)
A Seed	Living	This is a tricky one! A seed is in a "sleeping" or dormant state. But it is alive because it has the potential to grow, breathe, and reproduce if it gets water, soil, and sun.

Practice Problems with Step-by-Step Solutions

Problem 1: Sorting Fun! Sort the following items into the "Living" or "Non-living" column:

					
Fish	Teddy Bear	Grass	Computer	Baby	Mountain


- **Step 1:** Look at "Fish". Does it move, breathe, eat, grow? Yes. It's Living.
- **Step 2:** Look at "Teddy Bear". Does it breathe or eat? No. It's Non-living.
- **Step 3:** Look at "Grass". It grows, makes its own food, and reproduces with seeds. It's Living.
- **Step 4:** Look at "Computer". It needs electricity, but doesn't eat or breathe. It's Non-living.
- **Step 5:** Look at "Baby". A baby definitely breathes, eats, grows, and moves! It's Living.
- **Step 6:** Look at "Mountain". It's a giant rock. It doesn't grow or breathe. It's Non-living.

Living	Non-living
Fish	Teddy Bear
Grass	Computer
Baby	Mountain

Problem 2: Think Deeper! A robot can move, make sounds (respond), and use electricity (like food). Why is a robot a non-living thing?

A robot is a non-living thing because it is missing some of the key characteristics of life.

- **Step 1:** Let's check the list. A robot can move and respond. It uses energy.
- **Step 2:** But, can a robot grow on its own from a small robot into a big robot? No.
- **Step 3:** Can a robot reproduce and make baby robots? No.
- **Step 4:** Does a robot breathe air? No.



Conclusion: Because the robot cannot grow on its own or reproduce, it is a very clever man-made, non-living thing.

Summary of Main Concepts

- The world is made of living and non-living things.
 - Living things have 7 characteristics: they move, breathe, need food, grow, respond, reproduce, and get rid of waste.
 - Non-living things do not have these 7 characteristics.
 - If something is missing even ONE characteristic, it is non-living.
 - Non-living things can be natural (like a rock) or man-made (like a toy).
 - Always check for all 7 "superpowers" to know for sure if something is alive.
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