

Living and Non-Living Detectives: A Two-Day Adventure

Overall Learning Goals for Mirabelle:

- To understand the basic characteristics of living things (they grow, breathe, need food/water, and can move on their own).
- To confidently sort objects into "living" and "non-living" categories.
- To create a project that shows her understanding of the difference between living and non-living things.

Day 1: The Great Nature Hunt

Materials Needed:

- A small bag or bucket for collecting items
- Computer or tablet for the PowerPoint and optional video
- Your "Alive or not alive" PowerPoint presentation
- Two pieces of paper or two containers (like shoebox lids)
- A marker
- **Optional Video Suggestion:** "Living and Non-living Things for Kids" by Homeschool Pop (Search on YouTube)
- **Optional Book Suggestion:** *What's Alive?* by Kathleen Weidner Zoehfeld

Lesson and Activities Plan (Approx. 25-40 minutes)

Part 1: Introduction - What is "Alive"? (10 minutes)

1. **Engage with a Question:** Start by saying, "**Mirabelle, today we are going to be science detectives! Our mission is to figure out the secret code that decides if something is living or non-living. Look around the room. Can you point to something you think is alive?**" (She might point to you, herself, or a plant). "**Great! Now, can you point to something that is NOT alive?**" (She might point to a chair, a book, etc.).
2. **Introduce the "Rules" of Life:** Say, "**You are a great detective already! There are special rules for things that are alive. Let's learn them. Living things do a few special things:**"
 - **They GROW and change.** (Show a baby picture of her vs. now).
 - **They need FOOD and WATER.** (Point to her lunch or a glass of water).
 - **They BREATHE air.** (Take a deep breath together).
 - **They can MOVE on their own.** (Wiggle your fingers and toes).
3. **Use the PowerPoint:** Go through your "Alive or not alive" PowerPoint. For each slide, ask, "**Let's test it. Does it grow? Does it need food? Does it breathe? Does it move by itself? Is it living or non-living?**" This makes it interactive and reinforces the rules.

Part 2: Activity - The Nature Detective Walk (15-20 minutes)

1. **Prep for the Mission:** Label one piece of paper or container "LIVING" and the other "NON-LIVING". Say, "**Detective Mirabelle, it's time for our first mission. We are going on a nature walk in our yard (or a nearby park) to find clues. Your job is to collect small**

things you find in this bag."

2. **Go on the Hunt:** Walk outside together. Encourage her to pick up interesting things like a leaf, a twig, a flower, a cool rock, a feather, an acorn, etc. Talk about what you see. **"Ooh, look at that bird! Do you think it's living? Why?"** (It moves, it needs food). **"What about that big rock? Is it living?"** (No, it doesn't grow or eat).

Part 3: Wrap-Up - Sorting the Treasures (5-10 minutes)

1. **Sort the Clues:** Come back inside and empty the collection bag. Pick up one item at a time.
2. **Ask the Detective Questions:** For each item, ask the key questions. For a leaf, say, **"This leaf came from a tree. Was the tree it came from living?"** (Yes!). **"What about this rock? Does a rock need to eat snacks to grow bigger?"** (No!).
3. **Categorize:** Have her place each item on the correct piece of paper or in the correct container. Celebrate her great detective work at the end!

Day 2: The Living World Collage

Materials Needed:

- Large piece of construction paper or cardstock
- A marker
- Child-safe scissors
- Glue stick
- Your "Live, Once Alive, or Never Alive Sorting Cards" printable
- Old magazines, grocery store flyers, or printed pictures from the internet (of animals, plants, cars, toys, etc.)
- **Optional Resource:** Your "Living and Nonliving Things Board Game"

Lesson and Activities Plan (Approx. 25-45 minutes)

Part 1: Review and Introduce a New Clue! (5-7 minutes)

1. **Quick Review:** Say, **"Good morning, Detective Mirabelle! Do you remember the four secret rules for something to be alive?"** (Grows, needs food/water, breathes, moves).
2. **Introduce "Once Alive":** Use your sorting cards. Show her a picture of a living thing (like a cow), a non-living thing (like a rock), and a "once alive" thing (like a wooden chair or a hot dog). Say, **"This is a tricky new clue for our detective work. Some things, like this wooden chair, aren't alive *now*. They don't grow or eat. But it was *made* from something that was living—a tree! We call this 'once alive'."**
3. **Quick Sort:** Quickly sort a few of the cards together into three piles: "Living," "Non-Living," and "Once Alive" to check her understanding. Keep it brief and fun. For today's main project, you will focus only on "Living" and "Non-Living" to keep it clear.

Part 2: Main Project - Living vs. Non-Living Collage (20-30+ minutes)

This project is perfect for her portfolio as it's a clear, creative demonstration of her learning.

1. **Prepare the Canvas:** Take the large piece of construction paper and draw a line down the middle with the marker. Write **"LIVING THINGS"** on one side and **"NON-LIVING THINGS"** on the other.

2. **Explain the Task:** Say, "**Your final mission today is to create a collage of our world. You are going to look through these magazines and cut out pictures of things you find. If it's a living thing, you will glue it on the living side. If it's non-living, you'll glue it on the non-living side.**"
3. **Create!:** Let her take the lead! Sit with her and help her cut if needed, but let her make the choices. As she picks a picture, ask her, "**Great choice! Tell me why you think a car is non-living,**" or "**A flower, excellent! How do you know it's a living thing?**" This verbal explanation reinforces the concepts. You can use some of the pictures from the sorting card printable as well.
4. **Showcase the Work:** When she's finished, praise her beautiful and smart work! Hang it up somewhere special.

Part 3: Extension (Optional, if she is still engaged)

- **Play the Game:** If she had fun and wants to do more, now is a great time to pull out the **Living and Nonliving Things Board Game**. It's a fun way to reinforce the lesson without any pressure.
- **Look in a Book:** Open the 'My Encyclopedia of Very Important Things' and flip to a page about animals or plants. Ask her to point out the living things. Then flip to a page about machines or buildings and ask her to point out the non-living things.