Lesson Plan Title

Living vs. Nonliving

Grade Level

Kindergarten

Subject Area

Science

MSCCRS

L.K.1A Students will demonstrate an understanding of living and nonliving things.

L.K.1A.1 With teacher guidance, conduct an investigation of living organisms and nonliving objects in various real-world environments to define characteristics of living organisms that distinguish them from nonliving things.

L.K.1A.2 With teacher support, gain an understanding that scientists are humans who use observations to learn about the natural world. Obtain information form informational text or other media about scientists who have made important observations about living things (e.g., Carl Linnaeus, John James Audobon, Jane Goodall).

Art Form

Music

MSCCR Creative Arts Standards

MU: Cr1.1.K Generate and conceptualize artistic ideas and work.

Generate musical ideas for various purposes and contexts. IMAGINE a. With guidance, explore and experience music concepts (such as beat and melodic contour).

MU: Cr3.2.K PRESENT a. With guidance, demonstrate a final version of personal musical ideas to peers.

MU: Cn10.0.K Synthesize and relate knowledge and personal experiences to make art. Synthesize and relate knowledge and personal experiences to make music.

CONNECT a. Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.

Duration

1.5 hours - Can be broken down into several sessions.

Materials

Images of things that are living and nonliving

Chart paper

A pair of rhythm sticks per student (or use unsharpened pencils)

Objectives

Students will understand that living things use energy, grow, react to their environment and reproduce.

Students will understand that scientists study things in the natural world.

Students will identify the beat and rhythm in a pattern.

Vocabulary

Organism

energy

reproduce

Scientist

Rhythm

Beat

Lesson Description

Introduce the science standards by watching the slideshow:

https://docs.google.com/document/d/17K2q6_rAVmC8F0SAKSQFJPRXcupGLSjv4FL0N1WZfO_U/edit?usp=sharing

Discuss the definitions from the slideshow.

Make a list of 10 things that are living; the students have to check and see if they use energy, grow, react to the environment and reproduce.

Now list 10 things that are not living. (a stick or dead leaf is still considered living because it was once part of something living)

Hold up a pair of rhythm sticks or (pencils).

Do you think these rhythm sticks (or even pencils) are living? Why did you give me that answer?

Do they eat? grow? react to anything if you put them down? make more sticks?

We are going to use these rhythm sticks to help you remember if an organism is living or nonliving.

Discuss:

Rhythm - the combination of notes (sound) and rests (silence)

Beat - the steady pulse of the music

Before passing out the rhythm sticks, explain the "rest position" (hold sticks straight up, in each hand, not allowing them to touch), which they should already be familiar with from their music teacher. Then state: "If you play before I say, I will take your instrument away" It only takes one kid to make an example and then others will follow.

Practice using the rhythm sticks keeping a steady beat and rests.

Divide the class into two groups. One group will tap their sticks to a steady pulse while saying "Liv-ing" (see attached notation). The other group will tap their stick to an elongated pattern and say "non" (see attached notation).

https://docs.google.com/document/d/1ZmIGRZDVsHmwwKgGAs66IRPQNrTk9RBH4oJcliaNI2Q/edit

Once the class if comfortable with tapping and saying these patterns, show them the music notes on the board (attached notation)

Pass out pictures. One group gets the living pictures. The other group gets the nonliving pictures.

Both groups get the same vocabulary: energy, grow, react, reproduce.

Ask them to create a rap using the pictures and vocabulary words.

(You may play the slow, steady drumbeat to make it more fun for the kids.)

Let them play for their classmates

Use these rhythms all year to remind the students about how to determine if something is living or nonliving.

We wouldn't know all this about living things if it wasn't for scientists. Scientists are people who study the natural world, which includes living organisms.

Mention Charles Henry Turner, a black zoologist (which is a scientist who studies animals), was the first person to discover that insects can hear!

Watch the YouTube video as a review.

Recommended Resources

<u>https://www.youtube.com/watch?v=bWBrusrCmX4&feature=youtu.be</u> (for review at the end of the lesson)

https://www.biography.com/scientist/charles-henry-turner

https://www.youtube.com/watch?v=aQoUfeRawX8 slow steady drumbeat

Extended Learning Activities

Create a rhythm for each (energy, grow, react, reproduce)

Get a sample of pond scum and view under a microscope

Research other famous scientists

Watch a live-cam on an animal at a zoo. https://nationalzoo.si.edu/webcams/panda-cam

Sources

The Kinder Smorgasbord

https://nationalzoo.si.edu/webcams

Tips

If you don't have rhythm sticks, use unsharpened pencils will work.

Author

Adapted by Nancy Gibson (idea inspired by The Kindergarten Smorgasbord)