INTRODUCTION

Title of the Lesson: Biodiversity

Learning Objectives

To enable the students to learn about living and non living things and to differentiate between them. Also introduce them to subject specific volcabulary.

Time Frame

The lesson should be designed to be implemented in either 2 or 3 sessions of one hour each.

Key Words Used

Living, Non- Living, Dead, Alive, Hatch, Planks, Birds, Animals, Worms, Trees, Lawn, Kitchen garden, Drip irrigation, carpenter

Teaching Notes

This is the introduction class to the natural world. This lesson plan gives you a starting point to talk to children about various things related to our biodiversity. It is totally flexible and you could stretch it further according to the demands of your group.

Do break the stereotypes. Let papa maintain a kitchen garden and cook breakfast. Mama could take the baby to school and protect the animals.

ENGAGE

STORY (Click For Slide Show)

Purpose

To provide students with opportunities to connect with the real world

To focus their thinking towards the concept and differentiate between living and non living things

To bring out prior learning by making connections with the story

To enable them to learn new vocabulary and subject specific terminology

Preparation

You could take the class out into the garden to be able to connect them to the nature.

You will need some soft toys as per the characters in the story. (optional) You could use pictures stuck on flash cards mounted on sticks / banners for role play.

Procedure

The class should sit in a group preferably in a circle to be able to have an eye contact with you.

Read the story aloud and use the props to support the story. It helps students focus better.

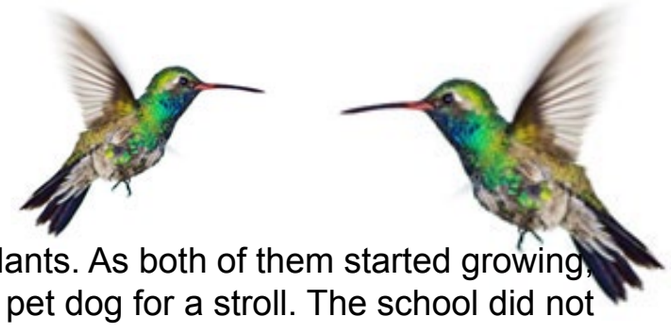
Discussion

Discuss how sunlight, water and soil play a role. What are some differences between living and non-living things? Are there any similarities? Discuss these.

Follow up

Home Assignment : Get pictures of five living and five non living things.

Biodiversity Primary Level



Once upon a time there was a little baby who had a pet dog. They had a huge garden full of trees and a variety of plants. As both of them started growing, it was time for the baby to go to school. Mummy took baby to school daily and daddy cooked breakfast and took the pet dog for a stroll. The school did not allow the pet dog to be admitted and so his father decided to make a wooden house for the dog. The baby ……(the class decides the name) told his parents that we should make a big house for him. So his father agreed and got some wooden planks to make the den. Mummy too wanted a pen for her hens so daddy and mummy used some of the planks to make the pen for the hen and the chicken in their kitchen garden.
Within a month their pet dog ……and the hen and the chicken ……..(the class decides their name too) started living in their respective houses in the front lawn and the kitchen garden.

Every day, the baby would feed his pet dog ……. and the birds some food. The dog ate chappati and milk and the hen and the chicken ate corn and some other grains. Since they needed water to drink the family went to the market and got a pot for the dog and a little bowl for the birds. But they preferred having water from the drip irrigation pipes in the garden. Both the animals were growing up fast.

One day, the hen lay some eggs and the baby's family was very happy that they would get fresh eggs for breakfast. Daddy brought some herbs from the kitchen garden and cooked breakfast for the entire family. But they were worried about the birds ……..and …….as their dog would eat them up. One day when the baby returned from school he saw all three pets playing together. He smiled and called his mummy and papa to see how they were becoming friends. It was a very happy day for the family.

After three months the hen hatched few eggs and five lovely chicks were born in her pen! ……were delighted to see the little babies. They named them ……..,……..,……..,……..,…….. (let the class decide five names) Soon the hen became protective. She would not let anyone come close to her babies. She would bring worms from the garden to feed them as they were very small to have corn and other grains.

One night a big cat came into their kitchen garden and attacked the babies but the dog saved them all. The entire family woke up hearing the noise.

That night mummy and papa decided that it was time to increase the size of the fence and make a bigger pen for the growing family. Mummy had a big surprise- she had already got the wires and a big pen to save the growing family. Next morning a carpenter arrived to make the pen.

The hen and the chicks were very happy to see the big brand new pen as it was getting cold. It was winter already.

The family celebrated that night and everyone slept peacefully.

EXPLORE

Walk in the Garden

Purpose

To enable the students to be differentiate between living and non-living things in real life

Preparation

You will need: To go for a walk around your school garden

Procedure

1. Make a line with students walking in a train with hands on each others shoulder
2. Tell them we are going outdoors and one needs to observe things carefully. Give them examples as to what you wish to observe.
3. Stop at various points pre decided where you can show both living and non living things.

Discussion

What do you see?

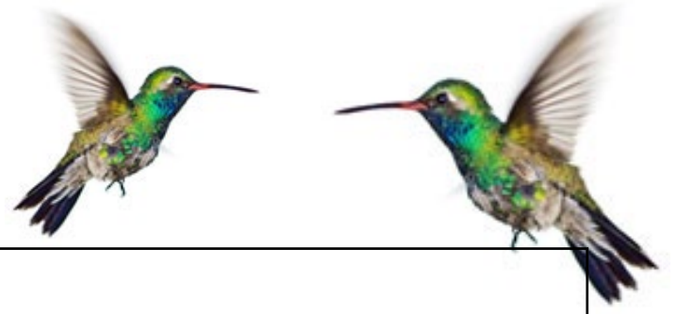
What do plants and animals need to grow? Point towards the sun.

Show them plants that are growing well. What do you think is the difference? What is a tree? Why cant grass grow into a tree. Explain giving suitable examples relating from the story. The Dog, the birds and we human beings.

Follow up

Get back to the class and draw what you saw on your trip.

Biodiversity Primary Level



Draw and label Living things	Draw and label non- living things

Put these up on the class soft board. Some students who have better language skills will be able to label themselves. Allow them to do so. Or even write about what they saw.

EXPLAIN

In class role play a magician

Purpose

To enable the students to be differentiate between living and non-living things

Preparation

You will need:

A variety of living and non living things hidden in two boxes.

A cape of a magician

Procedure

1. The class should sit in a group preferably in a circle to be able to have an eye contact with you.
2. Pull out the props one by one and let the students answer whether they are living or non living. Have a table on left which has a banner LIVING and on the right that says NON LIVING.
3. Let few students help you in separating the stuff from the box onto the tables.

Since you can not get many living things, you could get pictures or soft toys.

Discussion

Review the points-

What are some differences between living and non-living things? Are there any similarities? Discuss these.

What animals do you see daily? What is the difference between pet animal/bird, farm animal/bird and wild animal bird?

This will lead you to next activity- Discuss how sunlight, water and minerals play a role in growth of living things

Follow up

You could now ask them to get their pictures from the home assignment and paste them on two sheets provided to them which read- Living things and Non living things.

Living Things	Non Living things

ELABORATE

Grow a plant

- The teacher organizes 30 pots , soil, organic manure and a variety of seeds for the students.
- Each student is given a little pot.
- Each student is asked to fill mix the soil and manure kept on their table on a news paper sheet.
- They now fill their own pot.
- Each student is given a seed. The same seed can be given to a row of students and the teacher writes the name of the seed on the black board.
- The student writes the name on the card board label provided to them with a pen.
- Wait till everyone is ready.
- The teacher asks students to use the index finger to make a deep hole in the center of their pot filled with soil.
- Now the teacher asks them to lift their seed and sow it.
- Then they cover it with soil.
- The students fill ½ a glass of water and water their seed.
- Once the activity is over, the entire class holds their hands and promise to look after their seeds.

Biodiversity Primary Level

Daily fixed time and reminders to sing to their plant and water it.

Some extra plants should be sown and kept without water and another set in the corner of the room where there is no sunlight.

First recording can be done after three days.

Second recording, after another three days.

Level two: Measure the height with a scale after every three days and record the difference

Level three: Draw the shape and size of the plant as it grows. Categorize five different plants.

EVALUATE

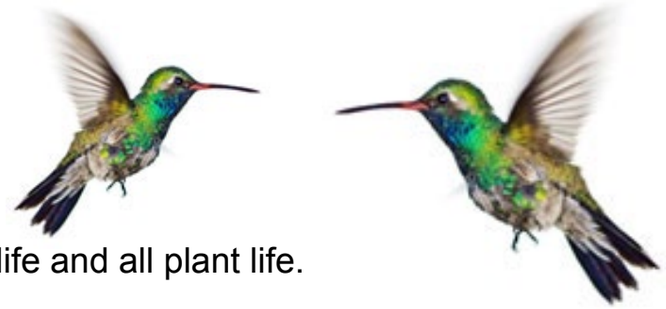
Do the given worksheet:

Level - 1: Tick the appropriate answer based on your observation:

Level - 2: Students need to write Non living and living

Level - 3: Students categorize them as Living or non living without the headings

	Living	Non Living
A Tree		
An insect		
The school bell		
A butterfly		
Tables		
Their pet animal		
The school bus		
A plant in the pot		
Dead leaves or Dead wood		



GLOSSARY

Living - Something that has life, it breathes, eats food and drinks water there fore grows. Human beings, all Animal life and all plant life.

Non living - Something that remains of the same size and is not living.

Drip Irrigation - A method of conserving water through a technique where the water drips just next to the roots of the plant

Fossil - Embedded remains of plants and animals in the layers of the earth.

Garden - An area where selected plants and trees are grown by a community or family.

Forest - A natural area where a variety of plant life and animal life adapts itself. Typically has trees and wild animals, birds and insects.

Pets - Animals that stay in our house like our family and are smaller in size and are harmless.

Wild Animals - Animals that live in the forest that eat up other animals for survival. Like- Lion and Tiger.

Farm Animals - Animals that live and breed on the farm. Like Ducks, hens, Pigs and cows.

Sunlight - Natural light from the sun.

Pen - A hen's house.

Den - A dog's house.

Carpenter - One who makes things out of wood. Like furniture, frames etc.

Winter - A season when it is cold

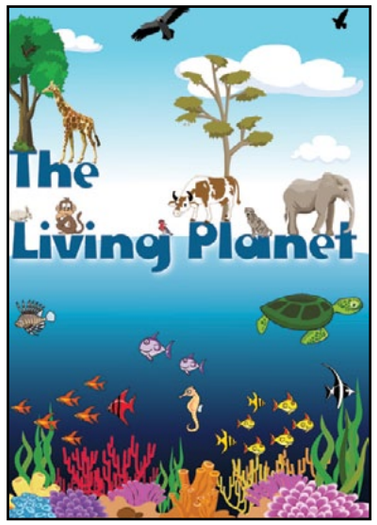
Herbs - Small plants that are used to add flavour to your dishes.

NOTES TO TEACHER

- This concept is the first step to introduce living things to the students.
- Check the learning style best suited across your class. Use activities that will enable the class to absorb your lesson content easily and should enable the child to retain the learnt concept.
- You will need to build on this concept and make similar lesson plans on How do you differentiate between a Tree, Shrub and a Creeper? Similarly, Introduce Invertebrates and Vertebrates; Amphibians and Reptiles etc suitable to your curriculum.
- Discuss the food chain. Introduce an activity where the children could make masks of various animals and plants in a food chain and design a game along with them.
- Read a lot of Panchtantra stories that discuss the environment with a moral.
- Do bring in values attached to caring and nurturing.
- You could discuss conservation of water. Read up about various methods of conserving and recycling water that are crucial to life.
- Add value to your discussions by talking about how we are the only known planet so far to have ‘Life’ because of presence of water and how early life forms were only aquatic.
- Life is precious. Celebrate life. End the concept with a picnic in a garden.

Acknowledgements

I would like to acknowledge my current TCRP training in Melbourne and my previous other trainings like ILEP and LEAD International that taught me to be original and confident. My students, who in the last 18 years have been a source of inspiration as well as my colleagues in Vasant Valley school who have been good critiques and mentors. Last but not the least, my family as well as my extended family members; who always encouraged story telling among us as kids.

FUN STUFF

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