TOOLKITS

Sustainable food consumption and production

1. SEMI SHADOW

Where our food comes from: The parts of the plants tour of vegetable crops in semi -shade.

Material: 3x6 containers & envelope with different vegetables.

Description and themes of the station to share:

Ask where what we eat comes from and introduce the parts of the plant: Seeds, roots, leaves, flowers, fruits. *Mention that the seeds are normally inside the fruit (except for one that they try to guess-Strawberry).

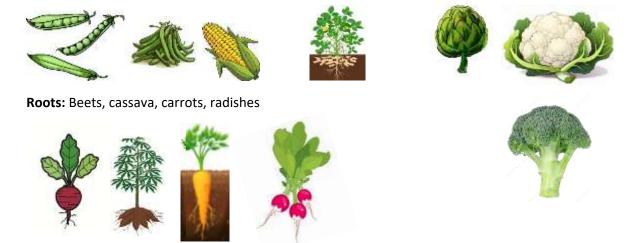
Asking what vegetable we eat is: seed (beans), roots (carrot), flowers (broccoli), leaves (chard), fruits (tomatoes).

*Mention that there are some vegetables that look like roots, but in reality they are not like:

- Potatoes are tubers or underground stems.
- Ginger or turmeric are rhizomes or false stems that grow horizontally and from there you get roots and the true stem.
- Onion and garlic are bulbs: the part between the stem and the root thickens and forms them.

Distribute 6 containers and an envelope to each group: each container has a name and inside the envelope make different vegetables. Ask them to put them where they belong.

Seeds: green beans, beans, peanuts, corn, peas Flowers: Broccoli, cauliflower, artichoke



Leaves: lettuce, charrga, parsley, celery, oregano, mint, cabbage



Fruits: paprika, eggplant, tomatoes, pumpkin, cucumber



Others: Garlic, onion, fennel, potato, ginger

Bulbs Tubers Rhizomes



Explain what semi-shade is for: It is like a hat for plants with the difference that through the small holes it lets in some of the sun's rays that the plants need to grow. In addition, it helps them maintain moisture in the soil. Do you see the difference in the soil in here compared to outside? Take a tour of the crops in the semi-shade and ask what vegetables they recognize. Make them smell the mint and oregano.

2. SOIL AND COMPOST: INVERTEBRATE ANIMALS

<u>Material:</u> compost with worms and material to show the garbage selection.

<u>Description and themes of the station to share:</u>

Introduction to garbage selection.



Recyclables

Paper and cardboard:
Includes newspapers,
magazines, cardboard boxes,
wrapping papers.

Plastic: Plastic bottles, milk bags, yogurt, thick bags like those containing bottles.

Glass: Bottles, jars, glass containers.

Metals: Aluminum cans, steel cans, metal containers.



Organic trash

Food remains: Fruit and vegetable peels, bones, egg shells, coffee grounds, used tea, food remains, etc.

Garden clippings: Cut grass, fallen leaves, twigs, withered flowers, etc.

Materials of animal origin: Egg shells, remains of meat, fish and shellfish (without large bones), shellfish shells, etc.

Paper and cardboard products: Used kitchen paper, paper napkins, paper coffee filters, dirty or foodstained cardboard, etc.

Natural materials: Cotton, wool, pet hair, etc.



Unusable garbage

Plastics from market bags, especially those with very striking colors.

Things made of different plastics or materials.
Stained or dirty papers
Old or torn clothing
Used batteries and batteries
(store in a special place)
Disposable diapers

We emphasize organic waste. We ask, what do plants need to live?

We mentioned that plants need a place where the seed can grow its roots. Plants use their roots to "take in" water and carry it throughout the plant. The soil is very important not only because it is where the plant obtains water but also where it obtains its nutrients, as we need vitamins and minerals found in the soil.

Every time a plant produces a plant, the soil is sharing its vitamins and minerals (it is "**used up**"), so it is important to nourish it again. We can help the soil by adding organic matter.

This organic matter is also food for many microorganisms and insects that live in the soil.

The soil is an unknown world, but without these insects we could not live. These small animals do not have skeletons, which is why they are called invertebrate animals and there are some that help the environment. For example:

- -Bees help in the reproduction of plants, they go from flower to flower carrying pollen on their bodies, others eat plant pests such as ladybugs.
- -Wasps that eat the larvae or eggs that some insects leave on the leaves.
- Other ants help in soil aeration and contribute to seed dispersal.
- The g uses also help aerate the soil thanks to the galleries they make in it. And they are the soil doctors par excellence because they **provide nutrients** with their excrement. And they love organic matter and compost!

One way to make compost is **vermiculture** (we show the scale model we have).

Two floors, the first are the worms or worms and on the top floor we put the organic matter through the holes in the base, the worms can go up to obtain their food. It is important to always cover the compost bin so that flies do not enter.

Making compost is easy: find a corner or a container where the sun does not reach much and put all our organic waste. It is best to mix it with dry material or cover it with plastic so that other animals do not come. Once a week, mix the preparation and let the microorganisms do their work.

3. FARM ANIMALS 1: VERTEBRATE ANIMALS

Visit the rabbits and turtles. Some ideas to share:

What is the difference between farm animals and wild animals?

- A. Farm animals are cared for by people to help on the farm. They can give food such as milk and eggs, work on the farm or be pets. These animals are used to living on farms, where humans care for and protect them.
- The Castilla rabbits were introduced by the Spanish, but we have some that are native to Bolivia (show photo of vizcacha) and mention that we will meet others later.
- They have the capacity to make between 200 and 300 poops per day. These are characterized by being uniform dark balls the size of a pea.
- Rabbits are pregnant for a little over a month and litters (called kits) can range between 4 and 12 individuals. The babies are born blind and hairless. They drink milk for four weeks.
- Sight is the most developed sense they have.
- B. Turtles are not usually farm animals, but they are here because some people want them as pets and when they can no longer take care of them because they don't have the space then they give them to the farm so that they are happier and have a bigger space and closest to their habitat/home. Where they live?

*In Beni the biggest threat to the turtles is us, there are people who sell the eggs.

4. TYPES OF SOILS

<u>Material:</u> 5 containers with clay, silty, sandy, rocky, loam (vegetable) soil and 5 empty containers to wet the soils.

Description and themes of the station to share:

Make them touch the floors. Give a brief explanation of each soil starting with rocky soil. In another container add water and make them touch the ground when it is wet.

Ask what they feel. Repeat with all floors.

Rocky: Rock is hard, solid soil. Plants cannot grow on rock because water infiltrates quickly and there is not enough nutrients or space for roots to grow.

Sand: Sand is like what you find on the beach of rivers or lakes or the sea. It is loose and grainy. Water passes easily through it, when it rains it easily infiltrates along with the minerals.

Clay: Clay is like the plasticine you use to make figures. It is sticky when wet and hard when dry. Sometimes, it can be difficult for plants to grow in it because of its hardness and because it can retain a lot of water.

Silt: Silt is a type of soft soil and is found near bodies of water as it is the result of fine particles carried by air, water from rivers and lakes. It is rich in nutrients and plants can grow well in it. It can be compacted, but less than clay soils.

Vegetable or Loam: it is a mixture of clay, sand and silt. It is the ideal type of soil for plants because it retains water, but also allows it to drain, and has many nutrients.

5. FARM ANIMALS 2: VERTEBRATE ANIMALS

On the farm there is also a sheep, ducks, and many chickens and guinea pigs.

- Sheep: we get wool, milk and meat from sheep. Sheep's milk has a protein content three times higher than cow's milk. There are 1000 breeds of sheep around the world, they have an exceptional memory and are able to remember people. They are herbivores, but can also eat insects. They sleep many times a day unlike the SH who sleep a lot only once a day.
- **Ducks:** Their feathers are 100% waterproof, they like water. There are more vertebrae in a duck's neck than in a giraffe's neck. The legs of these birds are unable to feel the cold, since they do not have blood vessels and nerve endings.

During the annual molt, ducks lose the ability to fly, as they lose many feathers. They can dive up to 5-6 meters.

After eating, they swallow stones and clay, this helps them digest food more efficiently. Baby ducklings actually consider the first creature they see when they hatch from the egg to be their mother.

Guinea pigs: they are native to the Andes and it is said that they say their name cuy cuy that's why they gave them that name. Unlike the rabbits we saw before, these animals are born with their eyes open and with fur ready for adversity. After 4 months of birth they can become pregnant. They are very skittish because they have a 340 degree angle of vision (the SH only 180°) they can see 33 images per second (22 the SH). They are so attentive that they sleep with their eyes open. They also call them Guinea Pigs because when the Spanish arrived they thought they were in India. Before they used them for experiments, but now they use more rats and mice.

 Chickens and roosters are the most studied animals. They are very intelligent animals, in fact, they can recognize their name and that of other chickens in their group. Additionally, they communicate with more than 24 sounds and alert their companions to the presence of predators.

Chickens are the closest living relatives of Tyrannosaurus rex. If they had kept their size, we would live among giant chickens. Chickens don't like water too much, although they can bathe if they feel like it. They prefer to preen in the dust, as it cleans their feathers and protects them from external parasites. It is said that chickens "are poopers" because they defecate even when they are asleep.

6. Soil erosion

Time: approx. 15 min

Objective: Show how soil erosion, flooding and how to prevent droughts can be avoided. Show with a visual and participatory example the effect of rain on the soil.

Materials: Experiment (3 bottles with soil, leaves, and something planted). Water

Dynamics: Brief explanation of the water cycle: **Evaporation:** It all starts with the sun. The sun heats the water in oceans, lakes, rivers and even puddles and causes it to turn into water vapor. Plants and forests also do "evaporation" which is called **Transpiration** carries water from its roots to the leaves. Water vapor rises to the sky, when it cools it changes back to water droplets that gather together to form clouds, this is called **condensation.** You can see them floating in the sky! And finally when clouds fill with water droplets, they can become so heavy that the water falls back to Earth in the form of rain, snow, hail or even dew - this is called **precipitation.**

What happens when rain falls to the ground? It returns to rivers, streams and lakes, and also leaches into the soil. But ... What happens if it rains a lot and the ground is completely bare? When rainwater runs down a mountainside or across a field, it can carry bits of soil with it, causing erosion. It is therefore important to protect the soil. As? Planting trees or covering the land with a

crop or organic matter such as leaves. This works like a mattress, the water arrives slowly

preventing the soil from eroding and losing its nutritional properties to produce food. The roots of

trees and other plants hold the soil in place, preventing it from washing away or shifting. In addition,

leaf litter and decomposing organic waste provide a protective layer that reduces the impact of

rain on the soil.

Show experiment and ask what they see. In the experiment there are 3 bottles where in one there

is only soil, another with leaves on top and the last with plants. Pour the same amount of water

into the bottles and observe how the water comes out. If there is time, have them fill the soil and

put down the leaves.

Finish by highlighting that forests act like giant sponges, absorbing water from rain and slowly

releasing it into the atmosphere through a process called plant transpiration. This released water

forms clouds and contributes to the formation of important precipitation because it increases the

humidity in the air and contributes to the formation of rain. This can help mitigate the effects of

drought in the region and maintain a water supply for vegetation and human communities.

Forests are also a **flood prevention.** Vegetation in forests helps reduce the risk of flooding by

absorbing and retaining large amounts of water during periods of heavy rain. This prevents water

from flowing rapidly over the soil surface, thus reducing the likelihood of flash floods and flood

damage.

7. FORESTS AND THEIR IMPORTANCE IN AGRICULTURE.

Time: approx. 15 min

Aim:

Introduce the observation of nature, go through the forest of silence with obstacles and guide a

walk where the boys and girls can touch the forest floor, the leaves and the trunks of the trees.

Materials:

15 small mirrors

Dynamic:

Forests give us a lot, as we saw that thanks to them we can prevent floods, when it rains they can

reduce the impact of drops on the ground, preventing erosion, but they are also like sponges that

retain water in their roots. They give us shade. Do you feel the difference between being inside

the forest?

Trees can act as a barrier against wind, or be used as living walls to protect crops. They

give us fresh air (oxygen) to breathe, wood to build, fruits to eat and a place to rest and

have fun.

All players receive a small hand mirror (for example, a rectangular cosmetic mirror). Each player

takes the hand mirror in hand and holds it with the surface of the mirror pointing upward (towards

the sky) directly under the nose. The view is directed through the mirror towards the sky or the

treetops. Looking in the mirror, you walk through the forest without looking at your feet or the

ground.

In this game, you have to concentrate on focusing your gaze only on the mirror and walking on

the natural terrain at the same time. After a while, however, you manage to see only the sky in the

mirror and continue walking through the forest through the forest.

You can also hold the mirror face down against your forehead.

We pass the forest of silence halfway with the mirrors and then we tell them to collect something

from nature. Let them observe what shape it has, how it feels to the touch, what it smells like.

Then we leave the object where we found it and take advantage of observing the forest floor,

seeing if there are insects, the color, the texture. We stayed quiet and tried to count on our fingers

how many sounds we heard.

Finally, as we leave the forest we reflect on what we saw, smelled, heard and touched. They can

then make them go through the forest again, but guickly.

Forest Functions

Station 1: Animals of Tunari Park

Time: approx. 15 min

Aim:

Show the biodiversity and animal habitat of the region. The importance of its protection for the

entire ecosystem. Activate the senses of sight and hearing. Promote participation and teamwork.

Materials:

6 large photos of animals (Llama, fox, cat, vizcacha, bear and monterita)

- Small animal photos x 3

Animal names x 3

Sound of each animal.

Dvnamic:

Show each animal to the entire group using the large photographs, giving them information about each one such as: importance, what they eat, where they live. Listen to the sound of each animal.

Distribute a set of photos and names to each group. And tell them to put the names and photos in order.

At the end tell everyone to bring the material and that the names are rearranged again for the next group.

Animal information:

Calls It is an animal from the heights, they live where trees almost no longer grow and did you know that they are from the camel family? They can go weeks without drinking water! They mainly eat shrubs and grasses. They are solitary animals that live up to 11 years. Helps dispel seeds and control rodent pests. Andean Fox You don't see them where there are cities; they live in the mountains or on the pampas. Their diet is composed of mice, wild guinea pigs, vizcachas, birds and also carrion or dead animals. When this is not available, it attacks domestic animals. They eat chickens, rabbits and even baby llamas and alpacas. This provokes the reaction of community members who kill them and burn their burrows. In Bolivia it has been seen that they use their tails as amulets @ Previously, foxes were highly respected because they were believed to be representatives of the mountain gods. Andean Cat-It is the feline with the greatest threat in all of America, so there is little information, and it is also very difficult to see because it usually only comes out at night to marry. It is a solitary animal that Titi is characterized by its long tail with black and white stripes and its black nose (its tail is almost the same length as its body). It feeds on small and medium-sized rodents as well as aquatic and terrestrial birds, eggs and reptiles. Currently, the main threats it suffers are from fragmentation, alteration and loss of habitat, hunting and the reduction of the populations of its prey. In our culture it was also considered sacred, hence the name titi (Aymara) represents fertility and abundance. *Peru has the Andean cat on one of its coins. It is a rodent like the rabbit, but it has a large, curled tail. It has a gray color that helps it blend in Vizcacha with stones. Have you ever seen a newborn mouse or rabbit? They are born bald, right? But vizcachas are born with hair and fully developed, but unlike rabbits they only give birth to one baby at a time. That is why they have a low population density. They are good climbers and very fast. They are vegetarians and almost all their water comes from what they eat because they live in colonies or large groups in dry places like the mountains. And they went viral because they look very cute because it seems like they are always sleeping. The tunari park is very large. Who knows Saba? It goes from here to Saba and continues behind Andean the mountains. This bear lives where it is warmest and rainy. (Tropical Andes). Medium size but Bearstanding it can measure 2 meters. It has a good sense of smell that is 7 times more sensitive Jukumari than that of a dog. spectacled bear It is very shy and is the only bear in South America, the only one with a flattened face and white stripes in its eves. Jukumari 's bite is stronger than that of the polar bear allowing it to shred tough, fibrous plant material such as Bromeliads and tree leaves, but it can also hunt other animals. It is threatened by hunting for parts trafficking (claws used for rituals) and the loss of its habitat (which may be caused by climate change or deforestation).

By protecting a species we protect an entire ecosystem.

Monterita of Cochabamba

It is a very special bird that is only found in Tunari Park , it is not found anywhere else in the world. Eats mainly seeds.

It lives in the forests of Kewiña and they are so related that the little bird has a color similar to that of the tree



They are about to become extinct due to the widespread destruction of their habitat: kewiña forests. Forests are being reduced to make way for intensive agriculture or are being replaced by plantations of exotic tree species, such as eucalyptus and pine, that degrade soil quality.

Station 2: Trees of Tunari Park

Time: approx. 15 min

Aim:

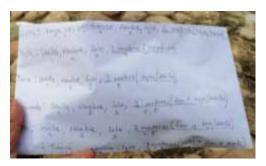
Show the plant biodiversity of the region. Awaken curiosity about the environment in which we move and the observation of details in nature.

Materials:

- 6 large photos of trees (Molle, Jacaranda, Kewiña, Chilijchi, Tipa and Tara)
- Small photos of trees x 3
- Tree names x 3
- Total 10 woods with different tree parts and tree parts.
- Envelopes with tree parts x 3

Detailed description behind each envelope:

- 1. **Kewiña**: Name, photo, dry leaf, trunk, 1 wood (Leaves/trunk) → total 5 items
- 2. Molle: Name, photo, seed, 1 wood (Leaves/fruit) →total 4 items
- 3. Tara: Name, photo, seed, 1 wood (Leaves/seed) →total 4 items
- 4. Jacaranda: Name, photo, seed, 2 woods (flower + Leaves/seed) →total 5 items
- 5. Type: Name, photo, seed, 2 woods (flower + Leaves/seed) →total 5 items
- 6. Chilijchi: Name, photo, trunk, 3 woods (flower + Leaves + Seed) →total 6 items



Dynamic:

During the walk, point out the different trees and mention some characteristics. When you arrive at the station, review the large photos of each tree.

Distribute the material to each group and indicate that all the trees that were shown are very close (except **the tare**, recommend doing that at the end).

Tell them to go in groups to look for and observe the trees and to put the parts where they belong in the boxes. At the end, review each group and tell them to put the parts inside their envelope and return the unordered material for the next group.

Information about trees:

Molle



The molle is Bolivia's heritage, it is prohibited to cut it. It is also called red pepper or false pepper. It has a set of leaves.

The bark of the tree is used as medicine, they use it as a healing agent, for bronchitis, rheumatic pain, facial paralysis (air) and also to make natural cosmetic products.

If the trunk is boiled it can be used to dye yellow.

It can live more than 200 years!

Jacaranda



It has purple flowers (there are also white ones) and has a set of leaves.

The fruits in <u>Guaraní</u> are called KAIJEPOPETE (ka -í jepopeté) "monkey's applause". Those two "hands" or lids protect the small seeds that have like wings that fly easily in the air.

They use its wood to make musical instruments.

I could live more than 100 years.

Tipa



The tipa can measure up to 40 meters, its flowers are yellow (it blooms at the end of the year) and it has seeds with wings that help it expand with the wind.

It is a semi-deciduous tree that resists drought without losing its leaves.

Scum leafhoppers benefit from the sap they excrete forming a foam during the spring.

Chilijchi



The flower can be cooked (it is the national flower of Argentina). It is a very strong tree, its trunk has thorns and it grows very tall where it houses many varieties of birds.

Its roots may protrude from the soil, but it helps stabilize and control soil erosion. Meanwhile, if it is located near water sources, it helps maintain and regulate the hydrological cycle, because by storing liquid in its trunk during the rainy season and filtering it into the soil during the dry season.

It is also called the May flower because it blooms that month, but also begins to lose its leaves.

"The ceibo is one of the few species that carries out its photosynthesis process from its trunk" due to the green color of all its branches. It stores water and energy in every inch of its bark and lets go of its leaves to stay alive until the next rains.

Kewiña



It is a tree that is only found in the Andes. He likes high places; they are the trees that reach the highest altitude in the world. Very resistant to cold and drought. It is important to protect them since it is home to many birds such as the **Monterita**, but also being one of the few trees

that can grow at high altitudes, it is important for the water cycle, for the recovery of soils degraded by erosion and as a source of subsidy for communities (firewood).

Polylepis, its scientific name is derived from two Greek words, poly (many) and lepides (sheets), referring to the bark composed of multiple sheets that peel off in thin layers. Its leaves are small and appear to have white hairs.

Tare



It is a native tree that has thorns in its leaves and its seeds or pods are used to tan leather, waterproof clay pots and make dyes for textiles, ceramics and for writing (tannic acid).

It also has medicinal properties used for respiratory diseases and skin infections.

Tara is ideal for recovering nitrogen from the soil like all legumes (bean or pea family). N is important for plant growth. It is good for recovering degraded or risky soils.

Station 5: Effect of the forest on the water cycle and soil erosion

Time: approx. 15 min

Aim:

Inform about the importance of forests in the water cycle, prevention of soil erosion, floods and as protection against droughts. Show with a visual and participatory example the effect of rain on the soil.

Materials:

- Experiment (3 bottles with soil, leaves, and something planted)
- Place to receive water.
- Water to empty

Dynamic:

Brief explanation about the water cycle: **Evaporation:** It all starts with the sun. The sun heats the water in oceans, lakes, rivers and even puddles and causes it to turn into water vapor. Plants and forests also carry out "evaporation" called **transpiration**, carrying water from their roots to the leaves. Water vapor rises to the sky, when it cools it changes back to water droplets that gather together to form clouds, this is called **condensation**. You can see them floating in the sky! And finally when clouds fill with water droplets, they can become so heavy that the water falls back to Earth in the form of rain, snow, hail or even dew - this is called **precipitation.**

What happens when rain falls to the ground? It returns to rivers, streams and lakes, and also leaches into the soil. But ... What happens if it rains a lot and the ground is completely bare? When rainwater runs down a mountainside or across a field, it can carry bits of soil with it, causing erosion. It is therefore important to protect the soil. As? Planting trees or covering the land with a crop or organic matter such as leaves. This works like a mattress, the water arrives slowly preventing the soil from eroding and losing its nutritional properties to produce food. The roots of

trees and other plants hold soil in place, preventing it from washing away or shifting. In addition, leaf litter and decomposing organic waste provide a protective layer that reduces the impact of rain on the soil.



Show experiment and ask what they see. In the experiment there are 3 bottles where in one there is only soil, another with leaves on top and the last with plants. Pour the same amount of water into the bottles and observe how the water comes out. If there is time, have them fill the soil and put down the leaves.

Finish by highlighting that forests act like **giant sponges**, absorbing water from rain and slowly releasing it into the atmosphere through a process called plant transpiration. This released water forms clouds and contributes to the formation of important precipitation because it increases the humidity in the air and contributes to the **formation of rain**. This can help **mitigate the effects of drought** in the region and maintain a water supply for vegetation and human communities.

Forests are also a **flood prevention**. Vegetation in forests helps reduce the risk of flooding by absorbing and retaining large amounts of water during periods of heavy rain. This prevents water from flowing rapidly over the soil surface, thus reducing the likelihood of flash floods and flood damage.

Station 4: Trash Selection

Time: approx. 15 min

Aim:

Introduce the **3Rs**: Reduce, Reuse, Recycle.

Teach about garbage selection in Bolivia (Law 755 on Comprehensive Waste Management). Show the different trash cans and what color trash can they should go in. Through a game, encourage the selection of solid waste.

Materials:

- 3 color baskets: yellow, black and green x3
- Garbage and garbage images
- Banner

Dynamic:

Talk about the fact that in Bolivia approximately 10,000 tons of garbage are produced daily (if an elephant weighs 100 kilos then we produce 100 elephants of garbage per day in Bolivia).

Garbage in Bolivia goes to open dumps. Only a small part of all garbage is recycled (less than 10%); the rest ends up in landfills, burned or abandoned in natural areas, rivers and streets.

What types of garbage do we make?



Recyclables

Paper and cardboard: Includes newspapers, magazines, cardboard boxes, wrapping papers, etc.

Plastic: Plastic bottles, food containers, bags, containers, etc.

Glass: Bottles, jars, glass containers, etc.

Metals: Aluminum cans, steel cans, metal containers, etc.

Textiles: Clothing, shoes, home textiles, etc.

Electronics: Old or disused electronic equipment, such as computers, mobile phones, televisions, etc. These are often collected at special recycling events or designated recycling centers due to their specialized handling.



Organic trash

Food remains: Fruit and vegetable peels, bones, egg shells, coffee grounds, used tea, food remains, etc.

Garden clippings: Cut grass, fallen leaves, twigs, withered flowers, etc.

Materials of animal origin: Egg shells, remains of meat, fish and shellfish (without large bones), shellfish shells, etc.

Paper and cardboard products: Used kitchen paper, paper napkins, paper coffee filters, dirty or foodstained cardboard, etc.

Natural materials: Cotton, wool, pet hair, etc.



Unusable garbage

Broken Plastics: Plastic toys that are broken and cannot be fixed.

Empty and contaminated containers

Broken or damaged toys

Stained or dirty papers

Old or torn clothing

Used batteries and batteries

Disposable diapers

Hazardous chemicals: Paints, solvents, pesticides, corrosive cleaning products, etc.

Broken or old furniture: Broken furniture, mattresses, carpets, etc.

How can we make less waste? Talk about the 3Rs: Reduce, Reuse, Recycle.

Reduce: How can we reduce the use of plastic such as light bulbs, bags, plastoforms?

It is important that we reduce the use of bags since plastic takes between **100 and 1,000 years to decompose.** Plastic has the property of breaking down into very small parts called microplastics that are suspended or floating in water. They are so small that we may have already inhaled, eaten or drank these micro plastics.

Reuse: How can we reuse things? Have you ever seen flower pots made of tires or bottles? We can use materials to make other materials.

Clothing is one of the biggest pollutants. The fashion industry is actually the second biggest polluter in the world, only after oil, being responsible for 10% of carbon emissions .

Recycle: What can be recycled?

Paper can be recycled and made into toilet paper or cardboard!

Plastic and glass bottles, as well as cans, when clean can be melted and reused.

Game:

Each group lines up. In turn, each member must **reuse a t-shirt and a cap** before Run to the other end and bring a piece of trash that is inside the container to the basket of the corresponding color (recyclable-yellow, organic-green or unusable-black). The team with the fewest errors in garbage selection wins.

At the end, take all the trash back to the container and organize the game for the next group or save the game.

Station 3: Forest Provision of natural resources/Timber and nontimber resources

Time: approx. 15 min

Aim:

Explore the wide range of resources that forests offer us. From **construction materials to foods and natural medicines.** Remember, not only is it a refuge for wildlife, but apart from playing a crucial role in regulating water and purifying air, it also provides us with **spaces for recreation**, **tourism and spiritual connection with our natural environment.**

Materials:

- Wooden puzzle x 3 (A, B, C)

Dynamic:

Show the oven (to make charcoal) and ask what they think it is used for. Ask them what we get from the forests (eg ask if anyone took an aspirin before because that medicine comes from the weeping willow, a tree that likes areas with water)

Distribute a puzzle to each group and tell them to form a straight piece of wood, paying attention to the rings or ribs of the trunk.

At the end tell everyone to bring the material and rearrange the puzzle for the next group.

Mention that forests are important because it is a place to have fun and learn. That there are many cultures like ours before that were considered sacred places.