

# Educational Activities

## Plants and leaves



## Introduction

The following are three examples of activities related to the identification of plants and their characteristics. Use your creativity to adapt them to your environmental, social, and cultural reality!

### ▶ Activity 1

## Herbarium



### In brief

Through an approach based on actively involving and stimulating the imagination of children, the names and functions of different traditional garden plants and medicinal herbs are identified. The ideal thing to do is to play this game when plants are in full bloom; the first part of the activity lasts about an hour and a half, the second about an hour and takes place after one month.

### Participants

Children aged between 8 and 16.

### Objectives

- Use a playful approach to encourage observation, exploration and direct knowledge of the garden environment, in particular the characteristics and properties of medicinal herbs and traditional plants in the garden.
- Stimulate children to collaborate with each other, to work in groups, to respect each other and their surrounding environments.
- Develop a positive approach to the school garden, by transmitting botanical knowledge and offering hands-on experience in collecting plant specimens and classifying them.
- Create a local catalog of traditional plants, herbs and spices.

### Coordinators

Teachers and a family gardener with experience also in the field of medicinal herbs.

### Materials

- Notebooks and pens
- Scissors, sheets of paper, pieces of stiff cardboard, string, needle-and-thread
- Newspapers
- Penknives or scissors
- Colored pens/pencils, adhesive tape or glue
- Some heavy stones

### Activity description

*Part 1: identifying medicinal herbs and traditional plants in the garden*

The teachers – with the help of a family gardener– identify the different plants in the garden and



verify with the children the ways in which they are commonly used.

#### *Part 2: collecting plant specimens*

With the children, detach from each plant the different sections of which it is composed (leaf, bark, flower) to identify them. Be very careful not to pluck them (use a penknife or scissors if possible) or wrinkle them.

#### *Part 3: describing specimens*

Place the perfectly dried leaves and other parts of the plants on a blank sheet of paper and describe them using the four senses (smell, hearing, sight, taste); write the characteristics down in your notebook, and on the sheet of paper next to each fragment write down which plant it is from.

#### *Part 4: drawing up the herbarium*

Place a second blank sheet of paper on top of the first; then put the 2 blank sheets (containing the plant fragments) between some newspaper pages, on top and underneath; then put them between 2 pieces of cardboard. Put the packets in groups of about 10 one on top of the other (better if grouped according to the type of material: leaves with leaves, flowers with flowers, etc.) and bind them with the string as tight as possible. Put them in a clean and dry, sunny and sheltered place, each under the weight of some big stones.

After about a month, untie the packets and press the leaves or the other parts of the plants pressed on sheets of paper, stuck to the sheets with glue or adhesive tape. Next to these, on the paper, draw up a sort of identity card (name and species, characteristics, use, etc.) using the notes written in the notebook the month before, adding new notes if possible. The sheets are then joined by sewing the edge with thread. Having thus completed your herbarium, hang it up in the classroom.

The final message to be conveyed is that each plant has specific characteristics and properties, and it is the responsibility of each child to know them in order to be able to grow them and put them to the best use possible.

#### **Variants**

If you want each child to have their own personal specimen, they are to be responsible, from the very start, for collecting specimens from a single plant, which will then be classified in each one's notebook.

If you have the possibility to carry out the activity in one full day, you can benefit from the presence of the experts in botanical / herbal medicines to carry out a practical demonstration of how these can be used. In this case, materials such as mortars and pestles will also be required.

#### **Further information**

For further information on the activity, contact Sara El Sayed – Egypt ([sara@nawayaegypt.org](mailto:sara@nawayaegypt.org)) and John Kariuki Mwangi – Kenya ([j.kariuki@slowfood.it](mailto:j.kariuki@slowfood.it))

## Leaves puzzle

### In brief

Children can learn to recognize plants from the characteristics of their leaves thanks to an approach based on stimulating their imagination and involving them actively.

### Participants

Children from 5 years of age, divided into groups of 3.



### Objectives

- Use a playful approach to encourage observation, exploration and direct knowledge of the garden environment.
- Stimulate concentration, observation, coordination.
- Distinguish and recognize forms and textures.
- Stimulate children to collaborate with each other, to work in groups, to respect others and their surrounding environments.

### Coordinators

Teachers.

### Materials

- 3 leaves from different plants (vegetables or fruit plants)
- A plate or table
- Glue or adhesive tape

### Preparation

The teacher cuts each leaf into three parts and on a flat surface mixes them all up.

### Activity description

#### *Part 1: observing*

Introduce the activity making some considerations and observations during a trip to the garden or to the orchard. For example, describe the different types of leaves, the plants they belong to...

#### *Part 2: reassembling the jigsaw puzzle and identifying the plant*

Each child in the group chooses a piece of leaf from the plate/table.

Each child has to reassemble his/her own leaf, making sure the edges match.

The children are then asked to identify which plant the leaf belongs to.

#### *Part 3: stimulating verbalization*

Certain aspects can be verified by observing leaf variations: Do they change? Do they lose liquids? Do they break easily? Do they split? Do they wither? Are they flexible or stiff? Do they have darker parts or lighter parts? Are they dry or moist?

#### Part 4: leaf art

Get the children to do some paintings or drawings (landscapes and animals) with the broken or reassembled leaves.

Do some tests on some sheets of paper, placing different pieces in the most plausible manner; then stick the works of art to the paper and hang them up in the classroom.

### ▶ Activity 3

## From leaf to leaf



#### In brief

Children learn to describe, recognize and couple leaves thanks to an approach based on stimulating their imagination and involving them actively.

#### Intended for

Children from 7 years of age (minimum 10 children).

#### Objectives

- Practice describing materials and elements found in nature.
- Stimulate concentration, observation, coordination.
- Develop and train the perception of the senses, distinguishing and recognizing shapes and textures.

#### Coordinators

Teachers.

#### Materials

Coupled leaves belonging to plants in the garden or orchard.



#### Preparation

The teacher collects 2 leaves from each plant to obtain a number of leaves equal to the number of children involved.

#### Activity description

##### Part 1: observing

Get the participants to sit in a circle and give each of them a leaf, telling them not to show their leaf to the others.

Each child has to carefully observe his/her leaf with the teacher's help, who suggests they consider color, size, shape, texture...

##### Part 2: identifying

In turn, each participant describes their leaf from a visual, tactile, olfactory point of view, again without showing it to the others. Those who, according to the description given, think they have the leaf with the same characteristics, sit in front of the participant who has just described his/her leaf for the comparison.



If they have recognized the leaf correctly, they will go and sit next to the participant with the matching part of the leaf otherwise return to where they were before.

The game continues until all the parts of the leaves have been coupled.

*Part 3: stimulating verbalization*

Which plant does it belong to? Is it edible?

*Part 4: leaf art*

With the leaves, get the children to do some paintings or drawings (landscapes and animals).

Do some tests on sheets of paper, placing different pieces in the most plausible manner; then glue the works of art to the paper and hang them up in the classroom.



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