UNIT 3: PLANTS

Plant life cycle is always a fun science unit. You get to talk about growing, planting, and nature. Plus, students love digging in and getting their hands dirty when you plant a seed yourself.

OBJECTIVES
1. Take part in working groups, implementing values and own attitudes of scientific thinking, fomenting the enterprising spirit and developing own sensitivity and responsibility towards individual and group experiences. **(Sense of initiative and entrepreneurship / Intrapersonal intelligence)** **2.** Employ the scientific method to plan and carry out projects, as well as simple devices and appliances, by means of observation, formulation of hypotheses and practical investigation, in order to produce conclusions which, at the same time, permit reflection on the actual learning process. **(Mathematical. Science and technology competence / Intrapersonal intelligence)** **3.** Use the information and communication technologies to obtain information, not only as an instrument of learning but also for sharing knowledge, and to recognize its contribution to improving the conditions of life of all people, besides preventing the risk situations stemming fromtheir use. **(Digital competence / Linguistic-verbal intelligence)**

CONTENTS	EVALUATION CRITERIA	LEARNING STANDARDS	SUPPLEMENTARY ACTIVITIES
.• Presentation of essential lesson content..**P** • Introduction to the vocabulary of the unit. **P** • Curiosity for reading scientific texts suitable for the cycle. **P** • Use of technological means for the study of living beings. **P** • Classification of plants	• Carry out observations, asking oneself previously and during these questions enabling significant information to be obtained. • Observe and ask appropriate questions to obtain information, use some tools and keep records as instructed. • Recognize and classify with basic criteria the	• Observes, identifies, names and classifies plants through images. • Knows how plants (flowers, fruits and seeds) reproduce. • Displays behaviour patterns of respect and care for living beings. • Observes, identifies, names and classifies plants in the environment. • Identifies and explains the difference	–**Song illustration:** illustrate the song on plant growth with flashcards. –**Parts of a plant:** observe the parts of a plant, name them and explain their function. Carry out one or two of the activities in the suggested link. –**Picking leaves:** analyse different forms and obtain a relief with these. Watch a video on the function of leaves and the photosynthesis process, as well as produce a mural on perennial and deciduous leaves. –**Flowering and non-flowering plants:** plant different plants in the classroom and

and identification of the main features and functions. **P** • Making outings that will permit on-the-spot observation of plants. **P** • Interest for plant observation and study. **C** • Features and forms of life of different types of plants. **C** • Plants of the closest natural environment. **C** • Habits of care and respect for plants: cares that they need in order to live. **V** • Development of scientific thinking. **P**	most typical plants in the environment as well as some other well-known species, applying information obtained by way of various means. • Identify and classify the living beings from the environment of the plants, learning their structure and appreciating the importance of water for life, developing values of care and respect. • Employ various sources, especially those available using Information and Communication Technologies. • Use strategies to carry out both individual and cooperative assignments, respecting the opinions and work of others, as well as the materials and toolsused.	between deciduous and perennial plants. • Identifies and explains the difference between flowering and non-flowering plants. • Identifies and explains the difference between deciduous and perennial plants. • Associates and describes the physical features and behavioural guidelines of some plants in keeping with the environments in which they live (camouflage, change of colour, etc.) • Knows the care required by plants.	seek information in pairs on the plant they have to look after. **-MR Potato:**The pupils make their own MR Potato with the hair made of grass. -**Life cycle of a plant** **-Tangram of a landscape** **-Shapes of a landscape**

METHODOLOGY MATERIALS AND RESOURCES

Procedures

1. *Discuss plants and what they need. Ask students if all plants are alike, and what they require to grow. Show All About Plants to give students an understanding of plants and their needs.*
2. *After watching the video, talk about the types of plants featured. Do all plants look alike? What needs do plants have? How do they get their food? Discuss the parts of flowering plants and the process of photosynthesis, the process by which plants make food. Talk about plants that are familiar to the students. What do they look like? Where do theygrow? What are theirneeds?*

-All About Plants video and VCR, or DVD and DVD player

-Crayons, colored pencils, or markers

-Paper and pencils

-Encyclopedias, botany or gardening books, or magazines with images and descriptions of plants

-Computer with Internet access (optional)

Other resources
– Digital whiteboard
– Educational resources
– Classroom; other spaces.
– Approximate time: three weeks.

The proposed methodology promotes the construction of significant learning through the following sequence:
• Adaptation of the presentation of the content to the linguistic competency of the students in the English language.
• Initial motivation and evocation of prior knowledge.
• Progressive and careful inclusion of contents by means of examples taken from everyday and contextualised situations to permit the transfer, generalisation and extension of learning, and which connect with the skills identified.

• Application of what is learnt to different activities: applying, reasoning, working with skills and multiple intelligences, projects, cooperative group, interactive, reinforcement and further learning..., sequenced by levels of difficulty, and which facilitate the skills and the different cognitive styles of the students.
• Different kinds of digital resources, using the digital whiteboard and the computer.

EVALUATION PROCEDURES AND TOOLS
– Wide-ranging student tasks carried out in the daily activities of the class.
– Wide-ranging student evaluation activities (book, photocopiable files...).
– Group work.

Assessment of the approach and processes employed as well as the result obtained
– Individual and collective questions.
– Dialogue.
– Oral expression.
– Individual oral test.
Observation and assessment of each student's degree of participation and the quality of their involvement.

Continuous evaluation
– Skills work
– Evaluation of skills / Multiple intelligences.
Individual record.

Plant Parts

You can get so involved when it comes to plant parts, but this anchor chart is a nice simplified version for younger learners. It really focuses on the essentials.


Vocabulary

Flower:
Definition: The bloom or blossom of a plant; the reproductive organ of an angiosperm plant
Context: Flowers come in all shapes, sizes, and colors.

Leaves:
Definition: The main organs of photosynthesis and transpiration in plants
Context: When you look at a forest in summer, you can see the green leaves of trees.

Photosynthesis:
Definition: A process used by plants to convert water, carbon dioxide and sunlight into carbohydrates and oxygen
Context: Photosynthesis allows plants to make their own food.

Roots:
Definition: The usually underground part of a seed plant body
Context: Roots hold the plant in place.

Seed:
Definition: A fertilized and mature ovule containing a plant embryo
Context: A new plant will come from the seed.

Stem:
Definition: Stalk; a slender or elongated structure that supports a plant
Context: The stem pokes up through the soil.

Life Cycle Made Easy

This anchor chart breaks down plant life cycle in an easy-to-understand diagram, focusing on key vocabulary words like germination and pollination.




MR POTATO,S HAIR

Step 1: Cut off a 20cm section of stocking that includes the toe Or use knee highs / pop socks

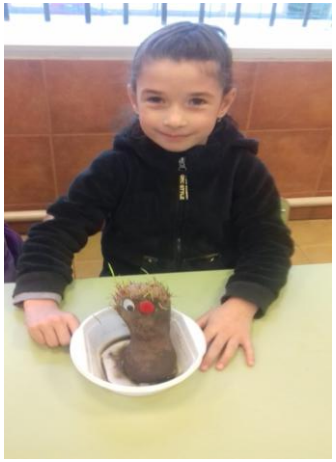
Step 2: Stretch the stocking over a large cup or mug, and spoon in about 2 teaspoons full of grass seeds

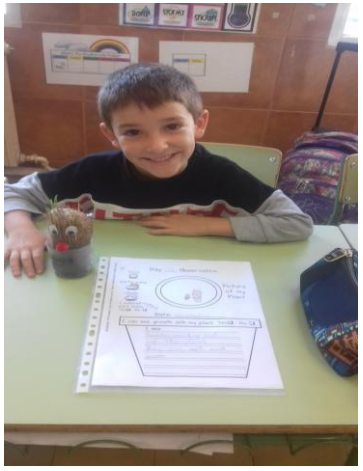
Step 3: Pack in some sand or potting soil. Aim for the head to be roughly tennis ball sized

Step 4: Tie a knot to close the end Don't cut off the dangly bit 1 Put your creation on a windowsill or light area. Check every day to make sure the head is moist - you might need to dribble a few drops of water onto the head. "Hair" takes about 1 week to sprout. A full head of hair takes 3-4 weeks to grow, and "greying and balding" will occur after about 6 weeks. Experiment with different hairstyles :-) You can make mohawks, pony-tails, crew-cuts... have fun with it!

Step 5: Make a nose or ears by grabbing a bit of stocking and twisting. Fasten the base of the nose with some thread or a small rubber band.

Step 6: Decorate! Use fabric scraps to decorate the face, and coloured paper to make the yoghurt container into a dress or a suit or whatever you like - get creative! Just make sure that any glue you use for the head is water-proof.





TANGRAM LANDSCAPE

Tangram is very simple to play. First, you need access to the tans themselves. We have a tangram puzzle,. Next, arrange the tans to match the provided silhouettes or outlines. The tangram rules are just as simple.

- *The pieces must all be connected*
- *They must be flat*
- *No pieces may overlap*
- *The tans may also be rotated and/or flipped to form the shape.*






SHAPES OF A LANDSCAPE

Pupils have to identify the shapes of a landscape with the shapes that we have done and sorted out in different pockets.