

COURSE PLANS

UNIT 2

1. BASIS

The content and activities in this unit focus on various aspects of plants, such as identifying their different parts, expanding knowledge of the vital functions nutrition, interaction and reproduction learning how to classify the main groups of plants; and evaluating the importance of plants to life on the planet and for our survival. Pupils will use different strategies and resources to acquire and express their knowledge about plants.

October November

2. METHODOLOGY

Through the activities studied in this unit, pupils will acquire the following knowledge:

- The parts of a plant
- Plant nutrition
- Plant interaction
- Sexual and asexual reproduction in plants
- The classification of plants
- The importance of photosynthesis.

| CONTENTS | EVALUATION CRITERIA | LEARNING STANDARDS |
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| <ul style="list-style-type: none"> • The parts of the plant and their functions. • Identification and description through photos and drawings. • The processes of nutrition in plants: absorbing substances, formation of nutrients, circulation, respiration and expelling waste. • Description of processes using photos and drawings. • The interaction function in plants. • Asexual reproduction in plants. Mechanisms of asexual reproduction. • Sexual reproduction in plants. • Reproduction of plants with flowers. Parts and functions of a flower, and stages of the reproduction process. • Structure and variety of fruits and seeds. • Carrying out experiments to study the germination of seeds. • Classification of plants. • Importance of photosynthesis in relation to atmospheric gases and as food for other living beings. • Understanding information, learning vocabulary, using language as a tool for communication and keeping a positive attitude towards reading. • Knowledge of and use of mathematical | <p>1. Understand the general structure of a plant and how its various parts function.</p> | <p>1.1. Identify, name and describe the parts of a plant, as well as the cellular and functional structure of its different parts.</p> |
| | <p>2. Learn about the vital functions of plants.</p> | <p>2.1. Define and characterise the nutrition function in plants, describing and naming the processes involved: absorbing substances, photosynthesis, respiration and expelling waste.</p> <p>2.2. Define interaction function. Identify and describe the mechanisms of plants to adapt to the conditions of the places where they live, and to respond to changes.</p> <p>2.3. Define sexual and asexual reproduction in plants. Identify and name the mechanisms of asexual reproduction. Identify parts and cells of the flower involved in reproduction.</p> <p>2.4. Define and describe pollination, fertilisation, seed and fruit formation, dispersal and germination of the seeds, and identify and name parts of different fruits.</p> |
| | <p>3. Know the different levels of classification that the kingdom of plants belong to and identify, name and classify plants from the surrounding area.</p> | <p>3.1. Learn the names of different groups of plants and name representative species from each of them. Identify, name and classify plants in the environment.</p> |
| | <p>4. Enhance the value of respect for nature and appreciate the importance of photosynthesis in</p> | <p>4.1. Describe photosynthesis and respiration and appreciate the contribution of nutrients and oxygen that plants make.</p> |

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| <p>operations and mathematical strategies to resolve problems.</p> <ul style="list-style-type: none"> • Understanding social reality and being responsible citizens, showing respect and solidarity to nature. • Knowledge and responsible use of ICT to investigate plants. • Using strategies to process information and applying it to different contexts. • Initiative and perseverance in tackling problems and defending opinions, developing attitudes of respect and collaboration when working in a group. | <p>plants and their contribution of nutrients to other living beings on the planet.</p> | |
| | <p>5. Develop curiosity and establish guidelines for observation of the structures of plants and their processes.</p> | <p>5.1. Show curiosity about the world of plants and follow guidelines of observation and experimentation.</p> |
| | <p>6. Understand information, acquire vocabulary about vegetation, express knowledge and opinions both orally and in writing and show interest in reading texts and exploring to discover more about plants.</p> | <p>6.1. Understand information, acquire vocabulary about vegetation, express knowledge and opinions both orally and in writing and show interest in reading texts about plants.</p> |
| | <p>7. Know and apply mathematical elements and strategies to solve problems about the ability of trees to absorb carbon dioxide that comes from contamination.</p> | <p>7.1. Know and apply mathematical elements, operations and strategies to solve problems about the ability of trees to absorb carbon dioxide that comes from contamination.</p> |
| | <p>8. Know and appreciate research about plants, their role in human nutrition and in the presence of oxygen in the atmosphere; participate in taking care of vegetation.</p> | <p>8.1. Know and appreciate research about plants, their role in nutrition of human societies and in the presence of oxygen in the atmosphere; participate actively in taking care of vegetation.</p> |
| | <p>9. Know and use ICT in a responsible way and use strategies to process information and apply it to different contexts, actively participating in the learning process.</p> | <p>9.1. Obtain and organise information, working with the unit structure, and using digital resources with interest and responsibility.</p> |
| <p>10. Show initiative and perseverance in tackling problems and defending opinions,</p> | <p>10.1. Show initiative, accept mistakes when doing self-evaluation, persevere in reinforcement tasks and</p> | |

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| | developing attitudes of respect and collaboration when working together in a group. | actively participate in cooperative learning. |
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3. COMPETENCIES

| COMPETENCIES | CONTENTS AND ACTIVITIES BY COMPETENCY |
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| Linguistic competency | Producing written texts of varying complexity for use in everyday situations or of different subjects. Reading the initial reading and the recommended texts in the reading plan. |
| Mathematical competency and basic competencies in Science and Technology | Being aware of the changes produced by man in the natural environment and their and making a list of reasons why photosynthesis is important. |
| Digital competency | Understanding information from the video activity 'I learn to observe'. |
| Learning to learn | Developing learning strategies by finding in the dictionary or other sources of information the words highlighted in the initial reading text. <i>Multiple Intelligences:</i> Drawing a plant, as a team, working together to develop spatial, intrapersonal and interpersonal intelligences |
| Social and Civic competencies | Developing a capacity for dialogue with others by looking for information about the importance of photosynthesis and explaining it to a colleague. <i>Values:</i> Evaluating the importance of plants to life on the planet, and for the survival of people. |
| Sense of initiative and entrepreneurial spirit | Expressing enthusiasm for the task and confidence in the possibilities of achieving objectives when looking for plants that often go unnoticed in the surrounding area to use for a research project. |
| Cultural awareness and expression | Expressing feelings and emotions artistically by designing a sticker to advertise the importance of photosynthesis. |