

## COURSE PLANS

### UNIT 1

#### 1. BASIS

This unit focuses on the basic structure and vital functions of living beings and their classification.

September        October

#### 2. METHODOLOGY

As pupils study this unit, they will gain understanding of cells, vital functions and the levels of organisation of living beings. They will also develop basic competencies for observing nature with respect and will use mathematical strategies and ICT to solve problems and investigate living beings. They will acquire vocabulary to express their knowledge, both orally and in writing.

CONTENTS	EVALUATION CRITERIA	LEARNING STANDARDS
<ul style="list-style-type: none"> <li>• Parts of the cell and how they work.</li> <li>• Cells and organisation: unicellular and multicellular organisms.</li> <li>• Tissues, organs and systems.</li> <li>• The vital functions</li> <li>• The nutrition function: processes and types.</li> <li>• The interaction function in living beings.</li> <li>• The reproduction function: asexual and sexual.</li> <li>• The five kingdoms of living beings and the characteristics of each.</li> </ul>	1. Acquire a basic understanding of the cell as a functional unit of living beings and know the physiological organisation of unicellular and multicellular beings.	1.1. Identify, name and describe the role of parts of a typical cell, the organisation of cells into tissues, organs and systems, and the definition of unicellular and multicellular organisms.
	2. Deepen knowledge of the vital functions.	2.1. Define the nutrition function; describe and name the processes involved. Explain the types of nutrition and identify and name the living beings that use them.  2.2. Define the interaction function and the reproduction function. Name, explain and compare the forms of reproduction: sexual and asexual.

<ul style="list-style-type: none"> <li>• Levels of classification.</li> <li>• Species</li> <li>• Basic information about binomial nomenclature.</li> <li>• Common names and scientific names.</li> <li>• Observing living beings.</li> <li>• Respect for nature and appreciation for the variety and complexity of living beings.</li> <li>• Understanding information, learning vocabulary, using language as a tool for communication and keeping a positive attitude towards reading.</li> <li>• Using mathematical operations and problem solving strategies.</li> <li>• Understanding social reality and showing respect towards society and nature.</li> <li>• Knowledge and responsible use of ICT to investigate living beings.</li> <li>• Using strategies to process information and applying it to different contexts.</li> <li>• Initiative and perseverance in tackling problems and defending opinions, developing attitudes of respect and collaboration when working together.</li> </ul>	<p>3. Be aware of the functional aspects for classifying living beings, classification hierarchies and the structure and usefulness of binomial nomenclature.</p>	<p>3.1. Explore the features for classifying living beings. Name the five kingdoms, describe their key features and name living beings that make up each kingdom.</p> <p>3.2. Identify different levels of classification of living beings. Define species. Be aware of the structure of binomial nomenclature and the scientific names of some animals in their surroundings.</p>
	<p>4. Develop guidelines for observing living beings, consolidate respect for nature and appreciate the wide variety of ways that living beings perform their vital functions.</p>	<p>4.1. Show curiosity about different aspects of living beings and apply their knowledge of organisational levels and classification to their descriptions.</p> <p>4.2. Show respect for nature and express curiosity about the natural environment close to them and appreciate conservation efforts.</p>
	<p>5. Understand information, acquire vocabulary about living beings, express knowledge and opinions, both orally and in writing and show interest in reading texts and exploring to discover more about biodiversity.</p>	<p>5.1. Understand information, acquire vocabulary about living beings, express knowledge and opinions, both orally and in writing and show interest in reading.</p>
	<p>6. Understand and apply elements and mathematical problem-solving strategies on actual measurements of microscopic organisms seen through the microscope.</p>	<p>6.1. Understand and apply elements and mathematical problem-solving strategies and operations on actual measurements of microscopic organisms seen through the microscope.</p>

	7. 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.	7.1. Obtain and organise information, working with the unit structure, and using digital resources with interest and responsibility.
	8. Show initiative and perseverance in tackling problems and defending opinions, developing attitudes of respect and collaboration when working together in a group.	8.1. Show initiative, accept mistakes when doing self-evaluation, persevere in reinforcement tasks and actively participate in cooperative learning exercises.

### 3. COMPETENCIES

COMPETENCIES	CONTENTS AND ACTIVITIES BY COMPETENCY
Linguistic competency	<p>Composing different types of texts creatively with literary sense.</p> <p>Developing a biography of Linnaeus.</p> <p>Communicating effectively in English.</p> <p>Enjoying reading.</p> <p>Reading the initial reading text and the texts recommended in the reading plan.</p>
Mathematical competency and basic competencies in Science and Technology	<p>Using knowledge of science and technology to solve problems and understand what is happening around us.</p> <p>Applying the knowledge learned to classify living beings using a dichotomous key.</p>
Digital competency	<p>Understanding messages developed in different codes.</p> <p>Correctly interpreting visual aids to complete the activity on the human cell.</p>
Learning to learn	<p>Generating strategies for learning in different learning contexts.</p> <p>Creating a diagram of the four processes that make up the nutrition function of living beings.</p>
Social and Civic competencies	<p>Showing a willingness to participate actively with others.</p> <p>Actively participating in group work with information about one of the five kingdoms.</p> <p>Recognising the importance of living beings and the environment in which they live.</p>
Sense of initiative and entrepreneurial spirit	<p>Creating new and divergent possibilities from prior knowledge of the subject.</p> <p>Commenting on the possibility of life on other planets such as Mars.</p>
Cultural awareness and expression	<p>Developing work and presentations with aesthetic sense.</p> <p>Performing the observation project of unicellular beings in a drop of water, in an orderly and neat way.</p>