







# EXTRACT FROM THE DIDACTIC CURRICULUM OF NATURAL SCIENCE FOR YEAR 5 OF PRIMARY SCHOOL



# **1.** CONTENT TIMING AND SEQUENCING

### 1<sup>st</sup> TERM

Learning situation	Basic knowledge
1. The cell and the living	A. Scientific culture
things	1. Initiation in scientific activity
	- Phases of scientific research (observation, formulation of questions and predictions, planning and carrying out experiments, collection and analysis of information and data, communication of results).
	<ul> <li>Appropriate instruments and devices for making precise observations and measurements according to the needs of the investigation.</li> </ul>
	- Basic scientific vocabulary related to different types of research.
	- Encouragement of curiosity, initiative, perseverance and a sense of responsibility in carrying out the different investigations.
	2. Life on our planet.
	<ul> <li>Basic aspects of the vital functions of the human being from an integrated perspective: obtaining energy, relationship with the environment and perpetuation of the species.</li> </ul>
	B. Technology and digitisation
2. Nutrition and food	1. Digitisation of the personal learning environment
	- Digital devices and resources according to the needs of the educational context.
	- Strategies for safe and efficient information searches on the Internet (assessment, discrimination, selection, organisation and intellectual property).
	A. Scientific culture
	1. Scientific activity
	- Encouragement of curiosity, initiative, perseverance and a sense of responsibility in carrying out different types of research.
	2. Life on our planet.
	<ul> <li>- Guidelines for a healthy and sustainable diet: healthy and balanced menus. The importance of the shopping basket and the labelling of products in order to know their nutrients and energy content. etiquetado de los productos para conocer sus nutrientes y su aporte energético</li> </ul>



## 2<sup>nd</sup> TERM

Learning situation	Basic knowledge
3. Matter and its characteristics.	<ul> <li>A. Scientific culture</li> <li>1. Initiation in scientific activity <ul> <li>Phases of scientific research (observation, formulation of questions and predictions, planning and carrying out experiments, collection and analysis of information and data, communication of results).</li> <li>Appropriate instruments and devices for making precise observations and measurements according to the needs of the investigation.</li> <li>Basic scientific vocabulary related to different types of research.</li> <li>Encouragement of curiosity, initiative, perseverance and a sense of responsibility in carrying out the different investigations.</li> <li>The relationship between advances in mathematics, science, engineering and technology in order to understand the evolution of society in the scientific-technological field.</li> </ul> </li> </ul>
4. Energy	<ul> <li>2.Life on our planet.</li> <li>3.Matter, forces and energy <ul> <li>Mass and volume. Instruments for calculating the mass and capacity of an object. Concept of density and its relation to the buoyancy of an object in a liquid</li> <li>Forms of energy, sources and transformations. Renewable (solar, wind, etc.) and non-renewable (fossil fuels, nuclear, etc.) energy sources and their influence on the contribution to the sustainable development of society.</li> <li>C. Societies and territories</li> <li>Eco-social awareness</li> <li>Sustainable lifestyles: the limits of the planet and resource depletion. The ecological footprint.</li> </ul> </li> </ul>



#### **3rd TERM**

Learning situation	Basic knowledge
6. Climate and biomes	A. Scientific culture
o. climate and biomes	1. Introduction to scientific activity
	- Basic scientific vocabulary related to different types of research.
	- Encouragement of curiosity, initiative, perseverance and a sense of responsibility in carrying out different investigations.
	-The relationship between advances in mathematics, science, engineering and technology in order to understand the evolution of society in the scientific-technological field.
	2. Life on our planet
	- Basic geological processes of landform formation and modelling.
7. Geographical diversity and	C. Societies and territories
relief	1. Challenges of today's world
	-Climate and the planet. Introduction to atmospheric dynamics and the world's major climatic areas. The main ecosystems and their landscapes.
	<ul> <li>The natural environment. The geographical diversity of Spain and Europe. Graphic, visual and cartographic representation through analogue and digital media and resources using geographic information technologies (GIT).</li> </ul>
	4. Eco-social awareness.
	<ul> <li>Climate change. Introduction to the causes and consequences of climate change, and its impact on the Earth's landscapes.</li> <li>Mitigation and adaptation measures.</li> </ul>
	- Sustainable lifestyles. Responsible consumption and production, balanced and sustainable food, efficient use of water and energy, safe, healthy mobility.







## 2. METHODOLOGY.

The proposed methodology promotes the construction of significant learning starting from the initial motivation and evocation of previous knowledge of the students. The contents are progressively incorporated by means of examples extracted from everyday situations, with contextualizations that allow the transference, generalization and amplification of learning, and that connect with the identified basic competences. Finally, the learning is applied in diverse activities (application, reasoning, work with basic competences and multiple intelligences, projects, cooperative group, interactive, reinforcement, deepening...), sequenced by levels of difficulty and that facilitate the work with basic competences and the different cognitive styles of the students.

Different types of digital resources will be used, using both the digital whiteboard and the computer. These resources include activities integrated in the learning sequence, interactive activities and a careful selection of Internet links. We will work with Google Classroom, where we will organize the







different materials and tasks that the students will carry out throughout the course. There will be shared different articles, tasks, videos ... promoting the use of Learning Technologies and Knowledge in the classroom. It will also use Google Drive to organize the students' homework.

A practical approach will be given to the subject, where students see the application of what they see in the classroom. To this end, the students will design different experiments in which they will work according to the scientific method. They will take advantage of the resources of the centre, such as the Biology and Geology laboratory, and those offered by the environment, participating in some of the activities that a city like London offers.

## **3. ASSESSMENT**

### **3.1 Evaluation procedures and instruments.**

Within each procedure we will find the following evaluation instruments.

WRITTEN	ORAL	ATTITUDINAL
<ul> <li>Various tasks of the student carried out in the daily activity of the class.</li> <li>Diverse activities of evaluation of the pupil (photocopiable cards, written test).</li> <li>Group work.</li> <li>ICT activities: interactive.</li> <li>Notebook.</li> <li>Specific tests</li> </ul>	<ul> <li>Individual and collective questions.</li> <li>Oral presentation.</li> <li>Classroom Interventions</li> <li>Debates</li> <li>Oral Presentations</li> </ul>	<ul> <li>Observation and assessment of the degree of participation of each pupil and the quality of their interventions.</li> <li>Order, cleanliness, quality.</li> </ul>

### 3.2 Grading criteria.

The final result of each procedure will be adapted to the following percentage-based grading criterion.

EVALUATION INSTRUMENTS	PERCENTAGE IN RATING
Oral and written tests. • Exams • Oral presentations • Laboratory Reports • Objective tests	50 %
Class work. Cooperative work Individual works ICT Tasks	30 %
Individual student notebook.	20 %
Overall rating	100%