

SCIENCE OVERVIEW YEAR 3

	START DATE	END DATE	LESSONS	TOPICS	CONTENTS
1st T E R M	11-SEP.	14-SEP.	2		REVISION AND INITIAL TEST
	17-SEP.	12-OCT.	8	Living organisms: the animal kingdom.	<ul style="list-style-type: none"> • An introduction to the classification of living beings by kingdoms. • Aquatic and land organisms. • Vital functions and their meaning. • General characteristics of animals. <p>Ideas about the fauna found in a given place. The aquatic and land environments.</p> <ul style="list-style-type: none"> • The needs of animals. The characteristics of animal bodies depending on the media in which they live. • Classification. Criteria and different classifications of animals: by their nutrition, their skeleton and their embryonic development.
	15-OCT.	19-OCT.	2	Working animals.	<ul style="list-style-type: none"> • The benefits of animals. • Food of animal origin.
	22-OCT.	26-OCT.	HALF-TERM		
	30-OCT.	16-NOV.	6	Working animals.	<ul style="list-style-type: none"> • Products of animal origin. • Working animals and pets. • Hunting and fishing throughout history. • The animal domestication and breeding. Benefits for human beings. • Different breeding activities of mammals. • Different bird breeding. Poultry farming • Breeding aquatic animals. Aquaculture.
	19-NOV.	14-DEC.	8	Living organisms: plants.	<ul style="list-style-type: none"> • General characteristics of plants. • Parts and functions of plants. • The vegetation of an area. • Types of plants according to their stems: grasses, bushes and trees. • Plants that produce seeds and plants that do not produce seeds. • Encourage respect for plants in the domestic and urban natural environments.
	17-DEC.	19-DEC.	2	REVISION	
	20-DEC.	07-JAN.	CHRISTMAS BREAK		

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2nd T E R M	08-JAN.	31-JAN.	8	Human beings.	<ul style="list-style-type: none"> • General characteristics of human beings: type of nutrition, internal structure, and types of reproduction. • Names and characteristics of external body parts. • Differentiating characteristics of human beings. Actions and benefits associated with them. • The human brain and its intellectual, sensory, and affective functions. • The vital functions of the human being: nutrition, interaction and reproduction. Main organs and systems involved in each of the vital functions. • The nutrition function. Digestive, circulatory, respiratory and excretory systems. • The interaction function. Basic relationships between the sense organs, the brain and nerves, and the locomotor system.
	01-FEB.	15-FEB.	4	The senses.	<ul style="list-style-type: none"> • The interaction function. Phases and processes involved. • The sense of sight or vision. The eye and its parts, paths of signs and perception in the brain. • The sense of hearing. The ear and its parts, paths of signs and perception in the brain.
	18-FEB.	22-FEB.	HALF-TERM		
	25-FEB.	08-MAR.	4	The senses.	<ul style="list-style-type: none"> • Senses of taste, smell and touch. The organs responsible for capturing stimuli, paths of signs and perception in the brain. • Locomotor system. Functions it performs. • The skeleton. Composition and functions. Joints. • The muscles. Types of muscles. How muscles work.
	11-MAR.	02- APR.	8	Food and digestion.	<ul style="list-style-type: none"> • Nutrients and food. • Water and fibre in nutrition. • Types of foods based on their nutrient content. • Obtaining nutrients: digestive system and digestion process. • The Mediterranean diet: characteristics and importance
	02-APR.	05-APR.	2	REVISION	
	08-APR.	22- APR.	EASTER HOLIDAYS		

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3rd T E R M	23-APR.	17-MAY.	8	Matter and materials.	<ul style="list-style-type: none"> • Matter, its general and specific properties: mass and volume. • How to measure mass and volume; instruments, units and procedures. • Some specific properties of matter. • Carry out experiments to measure mass and volume. • Basic ideas of pure substance and mixture. Some pure substances and mixtures from the immediate environment. • The states of matter. Basic characteristics of each state. • Changes of state. • Combustion. Elements involved and elements that are produced. • Natural materials and their uses. Properties of natural materials which are used in human activities. • Common man-made materials and their use in human activities. Properties of the materials for which they are used.
	20- MAY.	24- MAY.	2	Energy.	<ul style="list-style-type: none"> • Energy. • The forms energy can take.
	27- MAY.	31- MAY.	HALF-TERM		
	03-JUN.	21- JUN.	6	Energy.	<ul style="list-style-type: none"> • Sources of energy. • Sources of renewable and non-renewable energy. • Harnessing energy from the sun. Carrying out experiments. • Some energy transformations. Appliances that can transform energy. • Use of energy sources in human activities.
	24- JUN.	05- JUL.	8	Machines.	<ul style="list-style-type: none"> • Machines and the energy they need to work. • Identification of machines in the immediate surroundings and the forms and sources of energy they use to work. • Simple machines and their parts: ramp, levers, rollers and wheels. • Identification and description of the operation and parts of simple machines. • Compound or complex machines. Motors and their types. Other compound machines. • The evolution of machines over time. • Current machines and the human activities for which they are used. • The importance of machines in today's societies. • Some important machines throughout history.
	08- JUL.	09- JUL.	2	REVISION	
SUMMER HOLIDAYS					

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OBJECTIVES AND COMPETENCIES

- a) Know and appreciate the norms and values necessary for coexistence. Participate actively as a citizen, respect human rights and understand the importance of a pluralist and democratic society.
- Social and Civic competencies
- b) Develop a work ethic based on both individual and teamwork. Understand the importance of learning and a responsible attitude towards studying. Develop critical thinking skills, personal initiative, creativity and an entrepreneurial spirit.
- Learning to learn
 - Initiative and entrepreneurship
 - Social and Civic competencies
- c) Resolve conflicts in a peaceful and constructive manner in both family and social groups.
- Social and Civic competencies
 - Initiative and entrepreneurship
- d) Be familiar with, understand and respect different cultures and the differences between people, the importance of gender equality and equal rights for people with disabilities.
- Social and Civic competencies
- e) Understand and use the Spanish language appropriately as well as the co-official language of the corresponding autonomous community where relevant. Develop an appreciation for and an interest in reading.
- Linguistic competency
- f) Learn at least one foreign language and have the ability to express and understand simple messages in everyday situations.
- Linguistic competency
- g) Develop basic Maths skills, begin to solve problems using mathematical calculations and work with geometry and estimations, applying these skills to everyday life.
- Mathematical competency and basic competencies in Science and Technology
- h) Understand the fundamentals of Natural Science, Social Science, Geography, History and culture.
- Mathematical competency and basic competencies in Science and Technology
 - Social and Civic competencies
 - Cultural awareness

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- i) Begin to use information technologies to facilitate and enhance learning, applying critical thinking skills to assess information.
 - Digital competency

- j) Use different artistic styles to begin to create visual and audio-visual pieces.
 - Cultural awareness
 - Social and Civic competencies

- k) Know the importance of hygiene and health, accept your own body and that of others, respect differences and use physical education and sport as a means of personal and social development.
 - Mathematical competency and basic competencies in Science and Technology
 - Initiative and entrepreneurship
 - Social and Civic competencies

- l) Value, respect and care for the animals that share our environment.
 - Mathematical competency and basic competencies in Science and Technology
 - Social and Civic competencies

- m) Be pleasant and treat others with kindness. Understand that violence, prejudice and sexist stereotypes are unacceptable.
 - Social and Civic competencies
 - Initiative and entrepreneurship

- n) Learn about road safety and the importance of respect in preventing traffic accidents.
 - Social and Civic competencies

SCIENCE OVERVIEW YEAR 3

METHODOLOGY: Working scientifically.

During year 3, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests,
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers,
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions,
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables,
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions,
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions,
- identifying differences, similarities or changes related to simple scientific ideas and processes,
- using straightforward scientific evidence to answer questions or to support their findings.

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CLASSROOM ASSESSMENT

Observation of Processes: 20%

Teacher:

- checklists.
- anecdotal comments.
- reviews of drafts and revisions.
- oral presentations, rubrics and marking scales.

Students:

- peer-assessment.
- self- assessment.

Observation of Products and Performances: 20%

Teacher:

- presentations
- projects
- written assignments
- rubrics and marking scales

Students:

- peer-assessment.
- self- assessment.

Classroom Tests: 60%

Teacher:

- paper-and-pencil tests
- performance tests and simulations
- rubrics and marking scales

Students:

- peer-assessment.
- self- assessment.