

1st Quarter

HARCOURT SCIENCE V LEARNING TARGETS

Strand: Life Science

Unit A: Chapter 1

"From Single Cells to Body Systems"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
1-2	➤ Describe what cells are and they do.	✓ I can describe the structures found in cells.		
		✓ I can analyze processes that take place in cells.		
		✓ I can describe the interactions that take place in cells.		
	➤ Explain how body systems work and transport materials.	✓ I can explain the role of the excretory system, and identify its organs.		
		✓ I can recognize that many-celled organisms have specialized structures that transport materials.		
		✓ I can describe how the blood, heart, and lungs work together to help the body take in oxygen and give off carbon dioxide.		
		✓ I can analyze how the parts of the digestive system function.		
3	➤ Describe how bones, muscles, and nerves work together.	✓ I can describe the structures that make up the skeletal system.		
		✓ I can identify and describe the structures that make up the muscular system.		
		✓ I can explain how the parts of the nervous system work to carry messages through the body.		

Unit A: Chapter 2

"Classifying Living Things"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

4	➤ Explain how scientists classify living things.	✓ I can identify reasons why scientists classify living things.		
		✓ I can identify the five kingdoms of living things.		
		✓ I can recognize how scientists name living things.		
	➤ Describe how animals are classified and give examples of each group.	✓ I can identify the two main groups of animals.		
		✓ I can describe how vertebrates and invertebrates differ.		
		✓ I can give examples of vertebrates and invertebrates.		
	➤ Differentiate vascular and nonvascular plants and give examples of each group.	✓ I can describe the two main groups of plants.		
		✓ I can give examples of vascular and nonvascular plants.		

Unit A: Chapter 3				
"Animal Growth and Heredity"				
Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.				
5	➤ Understand how animals grow and reproduce.	✓ I can describe the role of mitosis in the growth of an organism.		
		✓ I can identify meiosis as a process of sexual reproduction.		
		✓ I can distinguish between mitosis and meiosis.		
Unit A: Chapter 3				
"Animal Growth and Heredity"				
Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.				
Week	Performance Objectives	Performance Indicators	SA	TA
6	➤ Describe life cycle.	✓ I can compare the life cycles of different animals.		
		✓ I can identify actions that require time for changes to be measurable, including growth.		
	➤ Explain why offspring look like their parents.	✓ I can identify traits that animal young inherit from their parents.		
		✓ I can identify traits that young plants inherit from their parents.		
Unit A: Chapter 4				
"Plants and Their Adaptation"				
Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.				
7	➤ Describe the functions of roots, stems, and leaves.	✓ I can compare the characteristics of plants that improve their ability to survive in a specific environment.		
		✓ I can describe how food is transported in plants.		
		✓ I can describe the function of plant leaves.		
8	➤ Describe how plants reproduce.	✓ I can compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem.		
		✓ I can compare the life cycles of plants and animals.		
	➤ Explain how people use plants.	✓ I can identify the role of plants in the daily diet.		
✓ I can describe how people use plants in their daily lives.				

2nd Quarter
HARCOURT SCIENCE V LEARNING TARGETS
Strand: Life Science

Unit B: Chapter 1

"Cycles in Nature"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
1	➤ Describe how nature reuse materials.	✓ I can identify the significance of the carbon-oxygen and nitrogen cycle.		
		✓ I can describe processes responsible for the formation of coal and petroleum.		
		✓ I can conclude that human activities can upset the balance of the carbon-oxygen cycle.		

Unit B: Chapter 1

"Cycles in Nature"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

2	➤ Explain why water cycle is important.	✓ I can describe the importance of the water cycle.		
		✓ I can describe the main processes in the water cycle.		
		✓ I can recognize that water is a limited resource that needs to be protected.		

Unit B: Chapter 2

"Living Things Interact"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

3	➤ Identify and describe ecosystems.	✓ I can describe interactions that occur within an ecosystem.		
		✓ I can analyze adaptive characteristics that result in an organism's unique niche in an ecosystem.		
		✓ I can identify factors that limit the number and type of organisms in an ecosystem.		
	➤ Explain and describe how energy flow through an ecosystem.	✓ I can identify the roles of producers, consumers, and decomposers in an ecosystem.		
		✓ I can describe how energy flows from one organism to another in food chains and in food webs.		
		✓ I can recognize that because energy is lost as heat at each level of consumption, ecosystems must have more producers than consumers.		

4	➤ Describe how organisms compete and survive in an ecosystem.	✓ I can identify ways in which organisms are adapted to compete for resources.		
		✓ I can describe some mutually beneficial interactions that occur within ecosystems.		
		✓ I can compare instinctive behaviors with learned ones.		
	➤ Define extinction and identify its causes.	✓ I can identify trends in resource use.		
		✓ I can describe some natural and human causes of extinction.		
		✓ I can identify ways humans can work to prevent the extinction of endangered species.		

Unit B: Chapter 3

"Living Things Interact"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
5	➤ Identify and describe land biomes.	✓ I can recognize that the climate of an area determines which biome will develop there.		
		✓ I can identify characteristics of each of the six major land biomes.		
		✓ I can compare the adaptive characteristics of species		
	➤ Identify and describe water ecosystems?	✓ I know how to observe pond organisms and classify them as producers and consumers.		
		✓ I can identify three types of water ecosystems.		
		✓ I can describe adaptations that allow organisms to survive in saltwater environments.		

Unit B: Chapter 4

"Protecting and Preserving Ecosystems"

Standard LS: The science of life at all levels of individual organisms, ecosystems, Earth's global web of life, and the possibilities of life in the Universe.

6	➤ Explain how ecosystems change naturally.	✓ I can identify actions that require time for changes to be measurable, like succession.		
		✓ I can compare primary succession with secondary succession.		
		✓ I can describe the features of a climax community.		
7	➤ Identify and describe how people change ecosystems.	✓ I can observe the effect of fertilizer runoff on an aquatic ecosystem.		
		✓ I can identify ways in which ecosystems are affected by human activities, including development and pollution.		
		✓ I can recognize that although ecosystems may recover from minor damage, some changes are irreversible.		
	➤ Identify and describe how people treat ecosystems more wisely.	✓ I can investigate what happens to garbage in a landfill over time by constructing a model.		
		✓ I can identify ways in which individuals can reduce their impact on ecosystems.		

8	➤ Identify ways people help restore damaged ecosystems.	✓ I can describe the role of wetlands in filtering water.		
		✓ I can recognize ways in which damaged ecosystems are restored.		
		✓ I can identify how students can restore natural ecosystems in their own backyards.		

3rd Quarter
HARCOURT SCIENCE V LEARNING TARGETS
Strand: Earth Science

Unit C: Chapter 1

"Changes to Earth's Surface"

Standard ES: The science of planet earth and its place in the solar system and in the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
1	➤ Identify and describe what processes change landforms.	✓ I can distinguish between erosion and deposition.		
		✓ I can explain how Earth's crust is broken down into soil.		
		✓ I can describe how water, wind, and ice change landforms.		
	➤ Identify the three layers of Earth and describe what causes mountains, volcanoes, and earthquakes.	✓ I can describe the three layers of Earth.		
		✓ I can explain how mountains form.		
		✓ I can describe what causes volcanoes and earthquakes.		
2	➤ Explain how has Earth's surface changed.	✓ I can explain the theory of continental drift.		
		✓ I can describe how features of Earth's surface have changed over millions of years.		
		✓ I can explain how fossils help scientists learn about plants and animals of the past.		

Unit C: Chapter 2

"Rocks and Minerals"

Standard ES: The science of planet earth and its place in the solar system and in the Universe.

	➤ Explain and describe minerals.	✓ I can collect information about materials using observational skills.		
		✓ I can describe properties of minerals.		
		✓ I can explain how minerals form and how they are used.		
	➤ Explain and describe rocks.	✓ I can differentiate among different kinds of rocks.		
		✓ I can describe the relationship between rocks and minerals.		
		✓ I can explain how different rocks form.		
3	➤ Explain and describe the rock cycle.	✓ I can give examples of sedimentary, igneous, and metamorphic rocks.		
		✓ I can observe patterns of change in Earth's rocks.		
		✓ I can describe processes involved in the rock cycle.		
		✓ I can identify the effects of erosion, dissolving, and weathering, which take place over time.		

Unit C: Chapter 3

"Weather and Climate"

Standard ES: The science of planet Earth and its place in the solar system and in the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
3	➤ Observe and measure weather conditions.	✓ I can specify where most weather occurs.		
		✓ I can describe how weather conditions are measured.		
		✓ I can explain how clouds form.		
4	➤ Explain and describe weather.	✓ I can identify the causes of weather.		
		✓ I can describe Earth's weather pattern.		
		✓ I can explain how winds influence the weather.		
	➤ Explain climate and how it changes.	✓ I can explain what determines a climate.		
		✓ I can identify and describe the five main climate zones.		
		✓ I can describe how human activity can affect climate.		

Unit C: Chapter 4

"Exploring the Oceans"

Standard ES: The science of planet Earth and its place in the solar system and in the Universe.

5	➤ Explain and describe what are oceans like.	✓ I can describe what oceans and seas are.		
		✓ I can explain what causes salinity in ocean water.		
		✓ I can describe the features of the ocean floor.		
	➤ Describe how ocean waters move.	✓ I can describe how waves move.		
		✓ I can explain what causes currents.		
		✓ I can explain what causes tides.		
	➤ Explain how oceans interact with the land.	✓ I can explain how ocean waves and currents shape the shore.		
		✓ I can explain how human activities affect the shore.		
	➤ Explain how people explore the oceans and use ocean resources.	✓ I can describe how scientists have explored the oceans.		
		✓ I can describe the submersible Alvin.		
		✓ I can explain how people use ocean resources.		

Unit D: Chapter 1

"Earth, Moon, and Beyond"

Standard ES: The science of planet Earth and its place in the solar system and in the Universe.

6	➤ Describe how the Earth and the Moon compare.	✓ I can recognize the similarities and differences of Earth and the moon.		
		✓ I can describe lunar and solar eclipse.		
7	➤ Identify and describe what else is in the solar system.	✓ I can recognize the time-and-space relationships of the sun-Earth-moon system.		
		✓ I can identify the Earth's daily and seasonal cycles in relation to the sun.		
		✓ I can compare the objects in the solar system.		

Unit D: Chapter 1 "Earth, Moon, and Beyond"				
<i>Standard ES: The science of planet Earth and its place in the solar system and in the Universe.</i>				
Week	Performance Objectives	Performance Indicators	SA	TA
7	➤ Explain how have people explored the solar system.	✓ I can identify and describe the telescopes, satellites, and space probes as instruments scientists use to study the solar system.		

Unit D: Chapter 2 "The sun and Other Stars"				
<i>Standard ES: The science of planet Earth and its place in the solar system and in the Universe.</i>				
7	➤ Describe the features of the sun.	✓ I can conduct a simple experiment using selected equipment.		
		✓ I can evaluate information to construct reasonable explanations from direct evidence.		
		✓ I can describe the structure and cycles of the sun.		
8	➤ Explain how stars are classified.	✓ I can classify stars based on their physical properties.		
		✓ I can identify star formation.		
		✓ I can recognize how scientists use telescopes to collect information about stars.		
	➤ Identify and describe galaxies.	✓ I can use a model to determine the sun's position in the Milky Way Galaxy.		
		✓ I can describe the four basic types of galaxies.		
		✓ I can compare galactic clusters to nebulae.		

4th Quarter
HARCOURT SCIENCE V LEARNING TARGETS
Strand: Physical Science

Unit E: Chapter 1 "Matter and Its Properties"				
<i>Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.</i>				
Week	Performance Objectives	Performance Indicators	SA	TA
1	➤ Explain how can physical properties be sued to identify matter.	✓ I can recognize that matter is anything that has mass and takes up space.		
		✓ I can conclude that an object's physical properties remain constant and can be used to identify it.		

Unit E: Chapter 1

"Matter and Its Properties"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
1	➤ Describe how matter changes from one state to another.	✓ I can recognize that heat is responsible for changes in the state of matter.		
		✓ I can compare and classify matter according to its physical state.		
		✓ I can identify melting and boiling points as constant temperatures at which substances change state.		
2	➤ Explain how does matter react chemically.	✓ I can compare a physical change and a chemical change.		
		✓ I can conclude that physical and chemical properties can be used to identify substances and to separate mixtures.		
		✓ I can observe that matter is conserved during both physical change and a chemical reaction.		

Unit E: Chapter 2

"Atoms and Elements"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

2	➤ Explain and describe atoms and elements.	✓ I can identify an atom and its major parts.		
		✓ I can describe an element.		
		✓ I can describe and compare the properties of metals.		
3	➤ Describe and give examples of compounds.	✓ I can recognize how the elements are grouped in the periodic table.		
		✓ I can identify a compound as a combination of two or more elements.		
		✓ I can describe what a chemical formula reveals about molecule.		

Unit F: Chapter 1

"Forces"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

3	➤ Describe how forces affect objects on Earth every day.	✓ I can describe what forces are and what they do.		
		✓ I can explain how the forces of friction, magnetism, and gravity act in our everyday lives.		
4	➤ Explain balanced and unbalanced forces.	✓ I can describe balanced and unbalanced forces.		
		✓ I can define acceleration.		
		✓ I can calculate net force when more than one force acts on an object.		
	➤ Define work and explain how it is measured.	✓ I can define work and explain how it is measured.		
		✓ I can define power and explain how it is measured.		
		✓ I can describe what machines do.		

Unit F: Chapter 2

"Motion"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
5	➤ Explain how motion and speed are related.	✓ I can recognize and describe the relationships among speed, velocity, acceleration, and momentum.		
		✓ I can describe how speed, velocity, acceleration, and momentum are measured.		
	➤ Identify and explain the three laws of motion.	✓ I can analyze and explain the three laws of motion.		
6	➤ Explain why planets stay in orbit	✓ I can describe how inertia and gravity interact to make an orbit.		
		✓ I can explain the law of universal gravitation.		

Unit F: Chapter 3

"Forms of Energy"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

Statement 1: For the science of matter and energy, do the smallest and deepest parts of the universe and the largest levels of the universe.					
	➤ Explain potential and kinetic energy and give examples of each.	✓ I can describe potential and kinetic energy.			
		✓ I can list the various forms of energy.			
7	➤ Explain electric energy.	✓ I can explain what electric energy is.			
		✓ I can tell what an electric current is.			
		✓ I can describe how electromagnets work.			
	➤ Describe light and sound energy.	✓ I can describe the characteristics of light energy and sound energy.			
		✓ I can identify and compare the characteristics of light waves and sound waves.			
	➤ Explain thermal and chemical energy.	✓ I can describe thermal energy.			
		✓ I can explain how thermal energy moves.			
✓ I can describe chemical energy.					

Unit F: Chapter 4

"How People Use Energy"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

8	➤ Describe how people use fossil fuels.	✓ I can explain how fossil fuels form.		
		✓ I can list some ways that people use fuels.		
		✓ I can explain why fossil fuels are nonrenewable.		
	➤ Explain how moving water generate electricity.	✓ I can explain how electric energy is produced from the mechanical energy of moving water.		
		✓ I can describe how tidal energy stations work.		

Unit F: Chapter 4

"How People Use Energy"

Standard PS: The science of matter and energy at the smallest microscopic levels and at the largest levels of the Universe.

Week	Performance Objectives	Performance Indicators	SA	TA
8	➤ Describe other sources of energy people use.	✓ I can describe other energy sources that are used in Palau.		
		✓ I can tell about the energy sources that we might rely on in the future.		

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