



GRADE 8 PROJECT TIME LEARNING OUTCOMES AND UNIT GUIDE

Who We Are

An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.

Central idea: Diversity and interdependence

Lines of inquiry: Origins of diversity Immigration and diversity Cell characteristics and relationships Human organ systems Careers in human health

Life Science – Cells, Tissues, Organs, & Systems (CS)

SS: Interactions and Interdependence of Nations (IN)

Analyze the characteristics of cells, and compare structural and functional characteristics of plant and animal cells.

Analyze how the interdependence of organ systems contributes to the healthy functioning of the human body.

Distinguish structural and functional relationships among cells, tissues, organs, and organ systems in humans and how this knowledge is important to various careers.

Investigate the meaning of culture and the origins of cultural diversity in Nicaragua and other countries.

Appraise the influence of immigration as a factor in Nicaraguan cultural diversity.

Where We Are in Place and Time

An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.

Central idea: Relationships between the land and human identity

Lines of inquiry: Distribution of water Movement of water Nicaragua's land evolution Societal effects of historical events in Nicaragua

Earth & Space Science – Water Systems on Earth (WS)

Social Studies: Dynamic Relationships (DR)

Analyze the global distribution of water and its impact on local environments.

Use the design process to demonstrate how water movement shapes our landscape.

Develop an understanding of the significance of land on the evolution of Nicaraguan identity.

Assess how historical events in Nicaragua have affected the present Nicaraguan identity.

How We Express Ourselves

An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation for the aesthetic.

Central idea: Creating constant movement to thrive

Lines of inquiry: Particle theory of matter Fluid systems Properties of fluids Forces in fluids Consumer choices Mixed economy

Physical Science – Forces, Fluids, & Density (FD)

Social Studies: Resources and Wealth (RW)

Investigate and represent the density of solids, liquids, and gases based on the particle theory of matter.

Identify and interpret the scientific principles underlying the functioning of natural and constructed fluid systems.

Investigate and describe physical properties of fluids (liquids and gases), including viscosity and compressibility.

Examine the effects of forces in and on objects in fluids, including the buoyant force.

Analyze the social and environmental consequences of living in the Nicaraguan mixed economy.

Assess the implications of personal consumer choices.



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How the World Works

An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

Central idea: Progress through forward movement

Lines of inquiry: Properties of visible light Electromagnetic radiation Legislation processes

Physical Science – Optics & Vision (OP)

Social Studies: Power and Authority (PA)

Identify and describe, through experimentation, sources and properties of visible light including rectilinear propagation, reflection, refraction.

Analyze different types of electromagnetic radiation and its impact on their daily lives.

Present the evolution of a piece of legislation, from its first conception to its implementation.

How We Organize Ourselves

An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.

Central idea: Vision and decision

Lines of inquiry: Decision-making processes Power and authority Political involvement of citizens Human vision Technology advancements in vision

Physical Science – Optics & Vision (OP)

Social Studies: Power and Authority (PA)

Explain how human vision works, including ways of correcting or extending human vision.

Examine the role of power and authority in the application of diverse decision-making processes in a variety of contexts.

Assess the impact of citizens' willingness and ability to actively engage in the political processes.

Sharing the Planet

An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

Central idea: Our responsibility is determining effective approaches to conserving the Earth's limited resources.

Lines of inquiry: Water distribution in ecosystems Natural and human-induced changes Assessing approaches to sustainability Environmental stewardship

Earth & Space Science – Water Systems on Earth (WS)

Social Studies: Resources and Wealth (RW)

Analyze the impact of natural and human-induced changes to the characteristics and distribution of water in local, regional, and national ecosystems.

Critique the approaches of Nicaragua and Nicaraguans to environmental stewardship and sustainability.