Wallenpaupack Area School District

Wallenpaupack Area North Primary and South Elementary
Course Title: Grade One Elementary Science
Length of Course: 80 minutes per week

District Policies:

Academic Integrity:
Academic integrity is essential to the success of an educational community. Students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in their areas of study. Written or other work which students submit must be the product of their own efforts and must be consistent with appropriate standards of professional ethics. Academic dishonesty, which includes cheating, plagiarism, multiple submissions and other forms of dishonest or unethical behavior, is prohibited.

Assessment:
The goal of grading is to report student progress and achievement to the parents to strengthen the home-school connection. The grade should accurately reflect the student's performance in mastering the PA Standards and the WASD curriculum.

Attendance:
Regular school attendance is vitally important to academic success. Not only does attendance reinforce and enrich the learning process; it also establishes patterns and attitudes that will carry forward into adult work habits. Regular, consistent attendance is a prerequisite to successful school life. Children should be absent only in cases of illness or emergency.

Special Education:
Our commitment to each student is to ensure a free appropriate public education which begins with the general education setting, with the use of Supplementary Aids and Services. Inclusive education describes the successful education of all students with the appropriate supports and services to participate in and benefit from the general classroom settings and other educational environments.

Course Description:

The elementary science curriculum provides opportunities for students to develop understanding and skills to become problem solvers in a scientific world. Students will observe, classify, compare, describe and show an understanding of our natural world. Living and Nonliving parts of our world will be investigated. Students will identify and compare natural and manmade systems. Students will investigate plant life and the many uses of plants.

Pennsylvania State Standards:

Living and Non Living Things	3.1.3.A1	Describe characteristics of living things that help to identify and classify them.
	3.2.3.B6	ENERGY Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.
	4.1.3.A	Differentiate between the living and non-living components in an **environment.**
	S3.A.1.1.1	Distinguish between fact and opinion.
	S3.A.2.1.1	Generate questions about objects, organisms, or events that can be answered through scientific investigations.
	S3.A.2.1.2	Make predictions based on observations.
	S3.A.2.2.1	Identify appropriate tools or instruments for specific tasks, and describe the information they provide (i.e., measuring [length—ruler; mass— balance scale] and making observations [hand lenses—very small objects]).
	S3.B.1.1.1	Identify and describe the functions of basic structures of animals and plants (e.g., animals [skeleton, heart, lungs]; plants [roots, stem, and leaves]).
	S3.B.1.1.2	Classify living things based on their similarities and differences.
	S3.B.1.1.3	Describe the basic needs of plants and animals and their dependence on light, food, air, water, and shelter.
	S3.B.1.1.4	Describe how plants and animals go through life cycles.
	S3.B.2.1.1	Identify adaptations of plants and animals that have helped them to survive.
	S3.B.2.1.2	Identify and describe plant and animal characteristics that are necessary for survival.
	S3.B.2.1.3	Identify characteristics for plant and animal survival in different environments (e.g., desert, forest, and ocean).
	S3.B.2.2.1	Identify physical characteristics (e.g., height, hair color, eye color) that could be passed on to offspring.
	S3.B.3.1.1	Identify the living and nonliving components of an ecosystem (e.g., living [plants, animals]; nonliving [water,

	soil, air]). **S3.B.3.1.2** Describe the interactions between living and nonliving components of an ecosystem (e.g., plants [water, sunlight]; animals [air, shelter]). **S3.B.3.2.2** Describe how changes in the environment (e.g., fire, flood) can affect an ecosystem. **S3.B.3.2.3** Describe how human interactions with the environment impact an ecosystem (e.g., road construction, pollution, urban development, dam building). **S3.C.1.1.2** Classify matter using observable physical properties (e.g., weight, mass, shape, size, color, texture, state).
Natural and Man Made Systems & Earth's Resources and Recycling	**3.3.5.A2** Describe the usefulness of Earth's physical resources as raw materials for the human made world. **S4.B.1.1.2** Compare similar functions of external characteristics of organisms (e.g., anatomical characteristics: appendages, type of covering, body segments). **S4.B.1.1.3** Describe basic needs of plants and animals (e.g., air, water, food). **S4.B.1.1.4** Describe how different parts of a living thing work together to provide what the organism needs (e.g., parts of plants: roots, stems, leaves). **S4.B.2.1.1** Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). **S4.B.2.1.2** Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water). **S5.B.3.2.2** Describe the usefulness of Earth's physical resources as raw materials for the human-made world. **S5.B.3.2.3** Explain how different items are recycled and reused. **S5.D.1.2.1** Identify physical, chemical, and biological factors that affect water quality. **S5.D.1.2.2** Describe the importance of wetlands in an ecosystem.

Sun, Earth, Stars (Rotation, Day/Night)	3.3.3.B1	Relate the rotation of the earth and day/night, to the apparent movement of the sun, moon, and stars across the sky.
		Describe the changes that occur in the observable shape of the moon over the course of a month.
	S3.D.3.1.1	Describe how Earth rotates on its axis once every 24 hours giving rise to the cycle of night and day.
	S3.D.3.1.2	Describe the predictable patterns of change that occur over time in the observable shape of the Moon.
Standards Incorporated in All Grade levels	3.4.4.A1	Understand that tools, materials, and skills are used to make things and carry out tasks.
	3.4.4.A2	Understand that systems have parts and components that work together.
	3.4.3.B1	Describe how using **technology** can be good or bad.
	3.4.3.B3	Identify and define products made to meet individual needs versus wants.
	S3.A.1.1.2	Identify examples of common technological changes, past and present, in the community (e.g., energy production, transportation, communication, recycling).
	S4.A.1.3.4	Explain what happens to a living organism when its food supply, access to water, shelter, or space is changed (e.g., it might die, migrate, change behavior, eat something else).
	S4.A.1.3.5	Provide examples, predict, or describe how everyday human activities (e.g., solid waste production, food production and consumption, transportation, water consumption, energy production and use) may change the environment.
	S4.A.2.1.3	Observe a natural phenomenon (e.g., weather changes, length of daylight/night, and movement of shadows, animal migrations, and growth of plants), record observations, and then make a prediction based on those observations.
	S4.A.2.1.4	State a conclusion that is consistent with the information/data.
	S4.A.2.2.1	Identify appropriate tools or instruments for specific tasks and describe the information they can provide (e.g., measuring: length - ruler, mass - balance scale, volume - beaker, temperature - thermometer; making

observations: hand lens, binoculars, and telescope).

S4.A.3.1.1	Categorize systems as either natural or human-made (e.g., ballpoint pens, simple electrical circuits, plant anatomy, water cycle).
S4.A.3.1.2	Explain a relationship between the living and nonliving components in a system (e.g., food web, terrarium).
S4.A.3.1.3	Categorize the parts of an ecosystem as either living or nonliving and describe their roles in the system.
S4.A.3.1.4	Identify the parts of the food and fiber systems as they relate to agricultural products from the source to the consumer.
S4.B.3.3.5	Describe the effects of pollution (e.g., litter) in the community.

Course Objectives:

Students will demonstrate the ability to:

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Students will master the skills of:

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Major Activities to Support Course Objectives:

Student Responsibilities:

Attendance expectations:

Homework expectations:

Make-Up Work:

Late Work:

Assessment:

Grading Components:

Content Pacing Guide:

Topic	Major Assignments	Estimated Time