Seattle Public Schools Science Standards

Liquids

(Insights)
Grade 2

PHYSICAL SCIENCE

EARL #1 The student understands and uses scientific concepts and principles.

Component	Benchmarks	Lesson #s
1.1 – Use properties to identify, describe, and categorize substances, materials, and objects.	***Properties of substances*** • identify, describe, and sort physical attributes of materials and objects (e.g., color, shape, size, and texture)	1 – 4, 6, 10
1.2 – Recognize the components, structure, and organization of systems and the interconnections within and among them.	***System*** • recognize that a system is a group of related objects that make up a whole • identify the parts of a system, how the parts fit together, and how they depend on each other (e.g., boat, floater, sinker, toys)	8 – 12

EARTH SCIENCE

EARL #1 The student understands and uses scientific concepts and principles.

Component	Benchmarks	Lesson #s
1.1 – Use properties to identify, describe, and categorize substances, materials, and objects.	***Nature and properties of earth materials*** • observe and examine the properties of earth materials (e.g., water)	2 – 12

SCIENCE SKILLS/ PROCESSES

EARL #2 The student understands the skills and processes of science and technology.

Component	Benchmarks	Lesson #s
2.1 – Develop the abilities necessary to do scientific inquiry.	***Questioning*** • ask questions about objects, organisms, and events in the environment	All lessons
	Designing and conducting investigations • plan and conduct simple investigations, using appropriate tools, measures, and safety rules	4, 6 – 9, 11, 12
	Evidence and explanation • use data to construct reasonable explanations	4 – 11
	Modeling • model objects, events, or processes by representing them with concrete objects (e.g., boat, toy, game)	8, 9, 12
	Communication • record and report observations, explanations, and conclusions using oral, written, and mathematical expression	2 – 12

2.2 – Apply science knowledge/skills to solve problems, meet challenges.	***Identifying problems*** • identify problems in which science and technology can be used to find solutions	8 -12
	Designing and testing solutions • propose, design, and test a solution to a problem (e.g., best boat)	8 - 12
	Evaluating potential solutions • evaluate how well a design or a product solves a problem	8, 9, 11, 12

SCIENTIFIC THINKING

EARL #3 The student understands the nature and contexts of science and technology.		
3.1 – Understand the nature of scientific inquiry	***Intellectual honesty*** • understand that all scientific observations should be reported accurately even when they contradict expectations	2, 4 – 11
	Limitations of science and technology • begin to distinguish between questions that can be answered with science and technology and those that cannot	3
	Dealing with inconsistencies • begin to explain why similar investigations may not produce similar results	4 – 11
	Evaluating methods of investigation • begin to recognize that results of scientific investigations can come from expected and unexpected sources (e.g., through sharing the results of investigations)	4 – 11
3.2 – Know that science and technology are human endeavors, interrelated to each other, to society and to the workplace.	***All peoples contribute to science and technology*** • understand how science and technology are used or have been used by people	8 - 12
	Relationship of science and technology • recognize that people have invented tools for everyday life and for scientific investigations	4 – 11
	Careers and occupations using science, mathematics, and technology • identify the knowledge and skills of science, mathematics, and technology used in common occupations	8, 9, 12