

Seattle Public Schools Science Standards

Fabric

(FOSS)

Kindergarten

PHYSICAL
SCIENCE

EARL #1 The student understands and uses scientific concepts and principles.		
Component	Benchmarks	Lesson #s
1.1 – Use the properties to identify, describe, and categorize substances, materials, and objects.	<p><i>Properties of substances</i></p> <ul style="list-style-type: none"> • observe and describe properties of materials • use properties to sort and classify materials 	1.1 – 2.1, 2.4
1.2 – Recognize the components, structure, and organization of systems and the interconnections within and among them.	<p><i>System</i></p> <ul style="list-style-type: none"> • identify how parts are put together to make a whole 	1.4 – 1.6
	<p><i>Structure of matter</i></p> <ul style="list-style-type: none"> • know that objects and materials can be made of small parts 	1.4 – 1.6
	<p><i>Physical and chemical change</i></p> <ul style="list-style-type: none"> • understand that objects and materials can undergo physical changes (e.g., cutting, tearing, weaving) and chemical changes (e.g., dyeing fabric, and using soap to remove stains) 	1.3 – 1.6, 2.2, 2.3

SCIENCE
SKILLS/
PROCESSES

EARL #2 The student understands the skills and processes of science and technology.		
2.1 – Develop the abilities necessary to do scientific inquiry.	<p><i>Questioning</i></p> <ul style="list-style-type: none"> • ask questions about objects, organisms, and events in the environment 	All lessons
	<p><i>Designing and conducting investigations</i></p> <ul style="list-style-type: none"> • plan and conduct simple investigations, using appropriate tools, measures, and safety rules 	2.1 – 2.3
	<p><i>Evidence and explanation</i></p> <ul style="list-style-type: none"> • use data (observations) to construct explanations 	2.1 – 2.4
	<p><i>Modeling</i></p> <ul style="list-style-type: none"> • model systems, events, or processes by representing them with concrete objects 	1.5, 1.6, 2.2, 2.3
	<p><i>Communication</i></p> <ul style="list-style-type: none"> • record and report observations through oral language, numbers, pictures, and words 	All lessons
2.2 – Apply science knowledge and skills to solve problems or meet challenges.	<p><i>Identifying problems</i></p> <ul style="list-style-type: none"> • begin to identify problems found in familiar contexts in which science and technology can be or have been used to design solutions (e.g., how to remove stains, color fabric) 	2.1 – 2.4

**SCIENTIFIC
THINKING**

EARL #3 The student understands the nature and contexts of science and technology.		
3.1 – Understand the nature of scientific inquiry	<p><i>Dealing with inconsistencies</i></p> <ul style="list-style-type: none"> begin to observe and discuss why similar investigations may not produce similar results 	2.1, 2.2
3.2 – Know that science and technology are human endeavors, interrelated to each other, to society and to the workplace.	<p><i>All peoples contribute to science and technology</i></p> <ul style="list-style-type: none"> begin to understand how science and technology are or have been practiced by people <p><i>Relationship of science and technology</i></p> <ul style="list-style-type: none"> recognize that people have invented tools for everyday life and for scientific investigations (e.g. cotton gins, spinning wheels, looms, sewing machines, manufactured fabrics) <p><i>Careers and occupations using science, mathematics, and technology</i></p> <ul style="list-style-type: none"> begin to identify how science, mathematics, and technology are used in the workplace 	<p>All lessons</p> <p>1.5, 1.6, 2.2, 2.3</p> <p>1.5, 1.6 2.1 – 2.4</p>