Tennessee Science

First Grade

Energy 1.PS3	1	**Make observations to determine how sunlight warms Earth's surfaces (i.e. sand, soil, rocks, and water).** 1.PS3.1
Waves and Their Application in Technologies for Information Transfer 1.PS4	1	**Make observations to construct an evidence-based account that objects are visible when light shines on them or if they produce their own light (e.g., very hot objects), and that different amounts of light influence what we can see.** 1.PS4.1
	2	**Conduct an investigation to describe how the path of a beam of light can be changed by interactions with different materials (i.e. light passes through, some light passes through, light changes directions, or light is blocked which can cause shadows).** 1.PS4.2
From Molecules to Organisms: Structures and Processes 1.LS1	1	**Develop and use a model to explain the structure of plants (i.e., roots, stems, leaves, flowers, fruits) and describe the function of the parts (taking in water and air, producing food, making new plants).** 1.LS1.1
	2	**Observe and analyze how living organisms grow and change over time.** 1.LS1.2
	3	**Analyze and interpret data from observations to describe how plants respond to changes in the environment (e.g., turn leaves toward the sun).** 1.LS1.3
Ecosystems: Interactions, Energy, and Dynamics 1.LS2	1	**Conduct an experiment to show how plants depend on air, water, minerals from soil, and light to grow and thrive.** 1.LS2.1
	2	**Obtain and communicate information to classify plants by where they grow (i.e., water, land) and the plant's physical characteristics.** 1.LS2.2
	3	**Develop and use models to show how plants and animals depend on their surroundings and other living things to meet their needs in the places they live.** 1.LS2.3
Earth's Place in the Universe 1.ESS1	1	**Use observations or models of the sun, moon, and stars to describe patterns that can be predicted.** 1.ESS1.1
	2	**Observe natural objects in the sky that can be seen from Earth with the naked eye and recognize that a telescope, used as a tool, can provide greater detail of objects in the sky.** 1.ESS1.2

	3 **Make observations to predict patterns between sunrise and sunset, and the change of seasons.** 1.ESS1.3
Engineering Design 1.ETS1	1 **Apply an engineering design approach to identify and solve practical problems.** 1.ETS1.1
	2 **Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved.** 1.ETS1.2
	3 **Develop a simple sketch, drawing, or physical model that communicates solutions to others.** 1.ETS1.3