Tennessee Science

Grade 1

Adopted 2016

Energy 1.PS3	1. **Make observations to determine how sunlight warms Earth's surfaces (sand, soil, rocks, and water).** 1.PS3.1
Waves and Their Application in Technologies for Information Transfer 1.PS4	1. **Use a model to describe how light is required to make objects visible. Summarize how Illumination could be from an external light source or by an object giving off its own light.** 1.PS4.1 2. **Determine the effect of placing objects made with different materials (transparent, translucent, opaque, and reflective) in the path of a beam of light.** 1.PS4.2
From Molecules to Organisms: Structures and Processes 1.LS1	1. **Recognize the structure of plants (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. **Illustrate and summarize the life cycle of plants.** 1.LS1.2 3. **Analyze and interpret data from observations to describe how changes in the environment cause plants to respond in different ways.** 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 (water, land) and the plant's physical characteristics.** 1.LS2.2 3. **Recognize how plants 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. **Analyze data to predict patterns between sunrise and sunset, and the change of seasons.** 1.ESS1.3

Engineering Design 1.ETS1	1. **Solve scientific problems by asking testable questions, making short-term and long-term observations, and gathering information.** 1.ETS1.1
Links Among Engineering, Technology, Science, and Society 1.ETS2	1. **Use appropriate tools (magnifying glass, basic balance scale) to make observations and answer testable scientific questions.** 1.ETS2.1