Tennessee Science

Third Grade

Matter and Its Interactions 3.PS1	1	**Develop a model of solids, liquids, and gasses to describe that each state of matter is made of particles too small to be seen.** 3.PS1.1
	2	**Construct an explanation about the effects of heating and cooling a substance differentiating between changes that can be reversed (i.e., freezing & melting) and those that cannot (e.g., baking a cake or burning fuel).** 3.PS1.2
	3	**Construct an argument based on evidence that materials have both fixed and changing properties, some of which are useful for identification of a material.** 3.PS1.3
Motion and Stability: Forces and Interactions 3.PS2	1	**Explain cause and effect relationships of forces that cannot be seen including interactions between two objects not in contact with each other (i.e., static electricity, magnetism and gravity).** 3.PS2.1
Energy 3.PS3	1	**Make observations of sound, light, heat, and motion to collect evidence that energy is present in a system.** 3.PS3.1
	2	**Develop a model to show that energy can be transferred from place to place by electric currents in a system (e.g., open, closed, simple, parallel, series circuits).** 3.PS3.2
	3	**Evaluate how magnets cause changes in the motion and position of objects, even when the objects are not touching the magnet.** 3.PS3.3
From Molecules to Organisms: Structures and Processes 3.LS1	1	**Use graphical representations to compare how species including humans and other organisms have unique and diverse life cycles.** 3.LS1.1
	2	**Analyze the internal and external structures that aquatic and land organisms have to support survival, growth, behavior, and reproduction.** 3.LS1.2
Ecosystems: Interactions, Energy, and Dynamics 3.LS2	1	**Obtain information to compare various ways that groups organize (e.g., specialized roles for members vs same roles for members) to explain the benefits of animal group behavior.** 3.LS2.1
Biological Change: Unity and Diversity 3.LS4	1	**Use evidence to explain the cause and effect relationship between a naturally changing habitat and how well an organism survives.** 3.LS4.1

	2 **Use evidence to determine the changes between an environment's biodiversity and human resources.** 3.LS4.2
Earth's Place in the Universe 3.ESS1	1 **Use data to categorize different bodies in our solar system including inner and outer planets, moons, asteroids, comets, and meteoroids according to their physical properties and motion.** 3.ESS1.1
Earth's Systems 3.ESS2	1 **Develop a model to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.** 3.ESS2.1
	2 **Develop a model to describe the cycling of water through Earth's spheres driven by energy from the sun.** 3.ESS2.2
	3 **Use tables, graphs, and tools to describe precipitation, temperature, clouds, and wind (i.e., direction and speed) to predict local weather and climate.** 3.ESS2.3
	4 **Incorporate weather data to describe major climates (e.g., polar, temperate, tropical) in different regions of the world.** 3.ESS2.4
Earth and Human Activity 3.ESS3	1 **Evaluate existing solutions that reduce the impact of natural hazards (e.g., fires, landslides, earthquakes, volcanic eruptions, floods, severe weather) on the environment.** 3.ESS3.1
Engineering Design 3.ETS1	1 **Design a solution to a real-world problem that includes specified criteria and constraints.** 3.ETS1.1
	2 **Apply evidence or research to support a design solution.** 3.ETS1.2