

Grade Six

Tecumseh School District
Science Curriculum Map

Quarter 1 (Shafer)

Standard	Learning Targets	Intro	Continuation	Assess Benchmark	Vocabulary
Lab Safety					
Observation/Inference					
Scientific Method					
Lab Reports					
PS.6 An object's motion can be described by its speed and the direction in which it is moving.	An objects position and speed can be measured and graphed as a function of time.				motion speed

Quarter 2 (Shafer)

Standard	Learning Targets	Intro	Teach	Assess	Vocabulary
PS.6 An object's motion can be described by its speed and the direction in which it is moving.	An objects position and speed can be measured and graphed as a function of time.				
PS.6 there are two categories of energy: kinetic and potential	<p>Objects and substances can have energy as a result of their position (potential energy).</p> <p>Objects and substances in motion have kinetic energy.</p> <p>Mass is conserved when substance undergo changes of state.</p>				<p>changes of state</p> <p>kinetic</p> <p>potential</p>
PS.6 All matter is made up of small particles called atoms.	<p>Each atom takes up space, has mass and is in constant motion. Mass amount of matter in an object.</p> <p>Compounds are composed of 2 or more different elements. Each element and compound has properties which are independent of the amount of sample.</p> <p>Molecules are combo of two or more atoms that are joined together chemically.</p> <p>Elements are a class of substances composed of a single atom.</p>				<p>matter</p> <p>atoms</p> <p>mass</p> <p>elements</p> <p>molecules</p> <p>properties</p>
PS. 6 Changes of state are explained by a model of matter composed of atoms and/or molecules that are in motion.	<p>Thermal energy is a measure of the motion of the atoms and molecules in a substance.</p> <p>When substance undergoes changes of state, neither atoms nor molecules themselves are changed in structure.</p>				<p>thermal energy</p>
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Quarter 3 (Shafer)

Standard	Learning Targets	Intro	Continuation	Assess	Vocabulary
ESS This topic focuses on the study of rocks, minerals, and soil which make up the lithosphere. By classifying and identifying different types of rocks, minerals, and soil, the past environment in which they formed can be decoded. 1. Minerals have specific, quantifiable properties.	Minerals are naturally occurring inorganic solids that have a definite chem. comp. Minerals have properties that can be observed and measured.				rocks minerals soil
ESS.6 Igneous, metamorphic and sedimentary rocks form in different ways.	Magma or lava cools and crystallizes to form igneous rock. Heat and pressure- metamorphic. Sedimentary rock forms as existing rock weathers and is then compressed and lithifies. Each rock type can provide info about the environment in which formed.				magma lava crystallizes heat and pressure metamorphic igneous sedimentary weathers compressed lithifies
ESS Igneous, metamorphic and sedimentary rocks have unique characteristics that can be used for identification and/or classification.	Most rocks are composed of one or more minerals, but there are a few types of sedimentary rocks that contain organic material such as coal. Composition of the rock, types of minerals present, arrangement, and/or shape and size can be used to identify rock.				rocks are composed of one or more minerals
ESS.6 Soil is unconsolidated material that contains nutrient matter and weathered rock.	Soil formation occurs at different rates and is based on environmental condition types of existing bedrock and rates of weathering. Soil forms in layers known as horizons. Soil horizons can be distinguished from one another based on measurable properties.				bedrock weathering
ESS.6 Rocks, minerals and soils have common and practical uses	Nearly all manufactured material requires some kind of geologic resource. Most geologic resources are considered non-renewable. Rocks, minerals, and soil are examples of geologic resources that are non-renewable.				non-renewable

Quarter 4 (Shafer)

Standard	Learning Targets	Intro	Continuation	Assess	Vocabulary
LS.6 Cells are the fundamental unit of life	All living things are composed of cells. Different body tissues and organs are made of different kinds of cells. The way cells function are similar in all living organisms.				tissues organs organisms cells
LS.6 All cells come from pre-existing cells.	Cells repeatedly divide resulting in more cells and growth and repair in multicellular organisms.				cells divide
LS.6 Cells carry on specific functions that sustain life.	Many basic functions of organisms occur in cells. Cells take in nutrients and energy to perform work, like making various molecules required by a cell or an organism. Every cell is covered by a membrane that controls what can enter and leave the cell. Within the cell are specialized parts for the transport of materials, energy capture or release, protein building, waste disposal, info feedback and movement.				membrane specialized parts
LS.6 Living systems at all levels of organization demonstrate the complementary nature of structure and function.	Whether the organism is single celled or multicellular, all of its parts function as a whole to perform the tasks necessary for the survival of the organism. The level of organization within organisms includes cells, tissues, organs, organ systems, and whole organism. Organisms have diverse body plans, symmetry and internal structures that contribute to their being able to survive in their environments.				cells tissues organs organ systems whole organism

Key Ideas Details (Qtrs 1-4)	Literacy – Reading Craft and Structure (Qtrs 1-4)	Integration of Knowledge & Ideas (Qtrs 1-4)	Literacy Writing
RST.6 – Cite specific textual evidence to support analysis of science and technical texts	RST.6 -8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they used in a specific scientific or technical context relevant to grades 6-8 texts and topics	RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)	CCRA.W.1 Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions	RST.6-8.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.	RST.6-8.8 Distinguish among facts, reasoned judgement based on research finding, and speculation in a text.	CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	RST.6-8.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	CCRA.W.6 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
WHST.6-8.1 Write arguments focused on discipline-specific content. b. Support claims(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.	RST.6-8.10 By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.	RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
			CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
			CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.