



2021 Knowledge and Skill Statement/Student Expectation	2021 Text	2017 Knowledge and Skill Statement/Student Expectation	2017 Text	Notes from TEA Staff
SCIENCE.7.1	Scientific and engineering practices The student, for at least 40% of instructional time, asks questions; identifies problems and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena or design solutions using appropriate tools and models. The student is expected to:	7.1	Scientific investigation and reasoning The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices. The student is expected to:	
		7.2	Scientific investigation and reasoning The student uses scientific practices during laboratory and field investigations. The student is expected to:	
SCIENCE.7.1.A	ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	7.2.A	plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology;	
SCIENCE.7.1.B	use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;	7.2.B	design and implement experimental investigations by making observations asking well defined questions, formulating testable hypotheses and using appropriate equipment and technology;	
SCIENCE.7.1.C	use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency approved safety standards;	7.1.A	demonstrate safe practices during laboratory and field investigations as outlined in Texas Education Agency approved safety standards and	Staff and TEA staff (7.266 7(7.2we)]6034 Tc 2.013 0 Td [(in)-9

		7.5	Matter and energy. The student knows that interactions occur between matter and energy. The student is expected to:	
		7.5.A	recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis and	The concept of Q H U J \ W U D Q V I R U P D W L R Q M D G F K H P L F D to Grade 5.
SCIENCE.7.7	Force, motion, and energy. The student <u>describes the cause and effect relationship between</u> force and motion. The student is expected to:	7.7	Force, motion, and energy. The student knows that there is a relationship among force, motion, and energy . The student is expected to:	Force, motion, and energy were split between Knowledge and Skill statements, 7.7 and 7.8.
SCIENCE.7.7.A	calculate average speed using distance and time measurements <u>from investigations</u>	6.8.C	calculate average speed using distance and time measurements;	The concept of average speed was moved from Grade 6.
SCIENCE.7.7.B	<u>distinguish</u> between speed and velocity <u>in linear motion in terms of distance, displacement, and direction</u> ;	8.6.B	differentiate between speed, velocity, and acceleration ;	The
				
				
				
				
				
				
				
				
				
				
				

		7.12.E	compare the functions of cell organelles to the functions of an organ system; and	Concept deleted
		7.12.F	recognize the components of cell theory.	The concept of cell theory was moved to Grade 6.
		7.13	Organisms and environments. The student knows that a living organism must be able to maintain balance in stable internal conditions in response to external and internal stimuli. The student is expected to:	Response to stimuli was deleted from middle school.
		7.13.A	investigate how organisms respond to external stimuli found in the environments such as phototropism and fight or flight; and	Response to stimuli was deleted from middle school.
		7.13.B	describe and relate responses in organisms that may result from internal stimuli such as wilting in plants and fever or vomiting in animals that allow them to maintain balance.	Response to stimuli were deleted from middle school.
		7.14.A	define heredity as the passage of genetic instructions from one generation to the next generation;	Heredity was moved to Grade 8.
		7.14.C	recognize that inherited traits of individuals are governed in the genetic material found in the genes within chromosomes in the nucleus.	The concept moved to Grade 8.
SCIENCE.7.14	Organisms and environments. The student knows how the taxonomic system is used to describe relationships between organisms. The student is expected to:	1. Use the taxonomic system to identify and name organisms within a taxonomic hierarchy.	_____	_____
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	_____	_____	_____	_____
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