Subject	Chapter 112. Science			
Course Title	§112.16. Science, Grade 5, Beginning	g with School Year 2010-2011.		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
 Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: 	(A) demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations	(iii) demonstrate the use of safety equipment as described in the Texas Safety Standards during classroom investigations		
 (1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: 	(A) demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations	(iv) demonstrate the use of safety equipment as described in the Texas Safety Standards during outdoor investigations		
 (1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: 	(B) make informed choices in the conservation, disposal, and recycling of materials	(i) make informed choices in the conservation of materials		
 Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: 	(B) make informed choices in the conservation, disposal, and recycling of materials	(ii) make informed choices in the disposal of materials		
(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to:	(B) make informed choices in the conservation, disposal, and recycling of materials	(iii) make informed choices in the recycling of materials		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(A) describe, plan, and implement simple experimental investigations testing one variable	(i) describe simple experimental investigations testing one variable		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(A) describe, plan, and implement simple experimental investigations testing one variable	(ii) plan simple experimental investigations testing one variable		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(A) describe, plan, and implement simple experimental investigations testing one variable	(iii) implement simple experimental investigations testing one variable		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(i) ask well-defined questions		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(ii) formulate testable hypotheses		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(iii) select appropriate equipment		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(iv) select appropriate technology		
 (2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to: 	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(v) use appropriate equipment		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(B) ask well-defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology	(vi) use appropriate technology		

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Course Title	§112.16. Science, Grade 5, Beginnin	g with School Year 2010-2011.		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(C) collect information by detailed observations and accurate measuring	(i) collect information by detailed observations		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(C) collect information by detailed observations and accurate measuring	(ii) collect information by accurate measuring		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence	(i) analyze information to construct reasonable explanations from direct (observable) evidence		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence	(ii) analyze information to construct reasonable explanations from indirect (inferred) evidence		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence	(iii) interpret information to construct reasonable explanations from direct (observable) evidence		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(D) analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence	(iv) interpret information to construct reasonable explanations from indirect (inferred) evidence		
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(E) demonstrate that repeated investigations may increase the reliability of results			
(2) Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to:	(F) communicate valid conclusions in both written and verbal forms	(i) communicate valid conclusions in written form		

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Student Expectation	Breakout	Element	Subelement
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	§112.16. Science, Grade 5, Beginning Student Expectation	§112.16. Science, Grade 5, Beginning with School Year 2010-2011.	§112.16. Science, Grade 5, Beginning with School Year 2010-2011. Student Expectation Breakout Element

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TEKS (Knowledge and Skills)	Student Expectation			

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Scientific investigation and	(A) in all fields of science, analyze, evaluate,	(viii) in all fields of science, evaluate scientific		
reasoning. The student uses critical	and critique scientific explanations by using	explanations by using experimental testing		
thinking and scientific problem solving	empirical evidence, logical reasoning, and			
to make informed decisions. The student	experimental and observational testing,			
is expected to:	including examining all sides of scientific			
	evidence of those scientific explanations, so as			
	to encourage critical thinking by the student			
(3) Scientific investigation and	(A) in all fields of science, analyze, evaluate,	(ix) in all fields of science, evaluate scientific		
reasoning. The student uses critical	and critique scientific explanations by using	explanations by using observational testing		
thinking and scientific problem solving	empirical evidence, logical reasoning, and			
to make informed decisions. The student	experimental and observational testing,			
is expected to:	including examining all sides of scientific			
	evidence of those scientific explanations, so as			
	to encourage critical thinking by the student			
(3) Scientific investigation and	(A) in all fields of science, analyze, evaluate,	(x) in all fields of science, evaluate scientific		
reasoning. The student uses critical	and critique scientific explanations by using	explanations, including examining all sides of		
thinking and scientific problem solving	empirical evidence, logical reasoning, and	scientific evidence of those scientific		
to make informed decisions. The student	experimental and observational testing,	explanations		
is expected to:	including examining all sides of scientific			
	evidence of those scientific explanations, so as			
	to encourage critical thinking by the student			
(3) Scientific investigation and	(A) in all fields of science, analyze, evaluate,	(xi) in all fields of science, critique scientific		
reasoning. The student uses critical	and critique scientific explanations by using	explanations by using empirical evidence		
thinking and scientific problem solving	empirical evidence, logical reasoning, and			
to make informed decisions. The student	experimental and observational testing,			
is expected to:	including examining all sides of scientific			
	evidence of those scientific explanations, so as			
	to encourage critical thinking by the student			
(3) Scientific investigation and	(A) in all fields of science, analyze, evaluate,	(xii) in all fields of science, critique scientific		
reasoning. The student uses critical	and critique scientific explanations by using	explanations by using logical reasoning		
thinking and scientific problem solving	empirical evidence, logical reasoning, and			
to make informed decisions. The student	experimental and observational testing,			
is expected to:	including examining all sides of scientific			
	evidence of those scientific explanations, so as			
	to encourage critical thinking by the student			

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xiii) in all fields of science, critique scientific explanations by using experimental testing		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xiv) in all fields of science, critique scientific explanations by using observational testing		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xv) in all fields of science, critique scientific explanations, including examining all sides of scientific evidence of those scientific explanations		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(B) evaluate the accuracy of the information related to promotional materials for products and services such as nutritional labels	 (i) evaluate the accuracy of the information related to promotional materials for products 		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(B) evaluate the accuracy of the information related to promotional materials for products and services such as nutritional labels	(ii) evaluate the accuracy of the information related to promotional materials for services		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(C) draw or develop a model that represents how something works or looks that cannot be seen such as how a soda dispensing machine works	(i) draw or develop a model that represents how something works or looks that cannot be seen		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	(i) connect grade-level appropriate science concepts with the history of science		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	(ii) connect grade-level appropriate science concepts with science careers		
(3) Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	(D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	(iii) connect grade-level appropriate science concepts with the contributions of scientists		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(i) collect information using tools, including calculators		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(ii) collect information using tools, including microscopes		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(iii) collect information using tools, including cameras		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(iv) collect information using tools, including computers		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(v) collect information using tools, including hand lenses		

Breakout Instrument

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and				
reasoning. The student knows how to use				
a variety of tools and methods to conduct				
science inquiry. The student is expected				
to:				

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observs, mi(sD0Kers)1uEdevic-03cting j9hctino			

Breakout Instrument

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and				
reasoning. The student knows how to use				
a variety of tools and methods to conduct				
science inquiry. The student is expected				
to:				

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xviii) collect information using tools, including collecting nets		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xix) collect information using tools, including timing devices, including clocks		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xx) collect information using tools, including timing devices, including stopwatches		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and	(A) collect, record, and analyze information			
	using tools, including calculators, microscopes,			
science inquiry. The student is expected	Celsius thermometers, prisms, mirrors, pan			
to:	balances, triple beam balances, spring scales,			

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxiv) record information using tools, including notebooks		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxv) record information using tools, including timing devices, including stopwatches		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxvi) analyze information using tools, including calculators		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxiii) analyze information using tools, including prisms		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxiv) analyze information using tools, including mirrors		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxv) analyze information using tools, including pan balances		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxvi) analyze information using tools, including triple beam balances		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxvii) analyze information using tools, including spring scales		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums	(xxxviii) analyze information using tools, including graduated cylinders		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:		(xlviii) analyze information using tools, including materials to support observation of habitats or organisms		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(B) use safety equipment, including safety goggles and gloves	(i) use safety equipment, including safety goggles		
(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	(B) use safety equipment, including safety goggles and gloves	(ii) use safety equipment, including gloves		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(i) classify matter based on physical properties, including mass		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(ii) classify matter based on physical properties, including magnetism		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(iii) classify matter based on physical properties, including physical state (solid, liquid, and gas)		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(iv) classify matter based on physical properties, including relative density (sinking and floating)		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(v) classify matter based on physical properties, including solubility in water		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(A) classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy	(vi) classify matter based on physical properties, including the ability to conduct or insulate thermal energy or electric energy		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(B) identify the boiling and freezing/melting points of water on the Celsius scale	(i) identify the boiling point of water on the Celsius scale		
 (5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to: 	(B) identify the boiling and freezing/melting points of water on the Celsius scale	(ii) identify the freezing/melting point of water on the Celsius scale		
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(C) demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand	(i) demonstrate that some mixtures maintain physical properties of their ingredients		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:	(D) identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water	(i) identify changes that can occur in the physical properties of the ingredients of solutions		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(A) explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	(i) explore the uses of energy, including mechanical energy		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(A) explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	(ii) explore the uses of energy, including light energy		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(A) explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	(iii) explore the uses of energy, including thermal energy		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(A) explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	(iv) explore the uses of energy, including electrical energy		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(A) explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	(v) explore the uses of energy, including sound energy		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	circuits requires a complete path through which an electric current can pass and can produce	(i) demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can pass		

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	an electric current can pass and can produce	(ii) demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can produce light		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:		(iii) demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can produce heat		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	circuits requires a complete path through which an electric current can pass and can produce	(iv) demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can produce sound		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in	(C) demonstrate that light travels in a straight line until it strikes an object or travels through one medium to another and demonstrate that light can be reflected such as the use of mirrors or other shiny surfaces and refracted such as the appearance of an object when observed through water	 (i) demonstrate that light travels in a straight line until it strikes an object or travels through one medium to another 		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(C) demonstrate that light travels in a straight line until it strikes an object or travels through one medium to another and demonstrate that light can be reflected such as the use of mirrors or other shiny surfaces and refracted such as the appearance of an object when observed through water	(ii) demonstrate that light can be reflected		
(6) Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to:	(C) demonstrate that light travels in a straight line until it strikes an object or travels through one medium to another and demonstrate that light can be reflected such as the use of mirrors or other shiny surfaces and refracted such as the appearance of an object when observed through water	(iii) demonstrate that light can be refracted		

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Subject	Chapter 112. Science			
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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(A) differentiate between weather and climate	(i) differentiate between weather and climate		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(B) explain how the Sun and the ocean interact in the water cycle			
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(C) demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky	(i) demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(C) demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky	(ii) demonstrate that Earth rotates on its axis once approximately every 24 hours causing the apparent movement of the Sun across the sky		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(D) identify and compare the physical characteristics of the Sun, Earth, and Moon	(i) identify the physical characteristics of the Sun		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(D) identify and compare the physical characteristics of the Sun, Earth, and Moon	(ii) identify the physical characteristics of the Earth		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(D) identify and compare the physical characteristics of the Sun, Earth, and Moon	(iii) identify the physical characteristics of the Moon		
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to:	(D) identify and compare the physical characteristics of the Sun, Earth, and Moon	(iv) compare the physical characteristics of the Sun, Earth, and Moon		



Breakout Instrument

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(10) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. The student is expected to:				