

Second Grade Science SBRC Rubric

Report Card Standard	TEKS	Performance Assessment	Assessment of Mastery		
Process Skills			PS	AS	IPS
Actively participates in planning and conducting investigations using tools safely.	1A Identify, describe, and demonstrate safe practices as outlined in the Texas Education Agency-approved Safety Standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately. 1B Identify and demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reuse or recycling of paper, plastic, and metal. 2A Ask questions about organisms, objects, and events during investigations. 2B Plan and conduct descriptive investigations.	Learners design and conduct descriptive investigations of objects or organisms, demonstrating safe practices. Throughout the investigations, learners collect and record data and effectively communicate their findings.	Demonstrates a solid ability to actively participate in planning and conducting investigations using tools safely.	Demonstrates partial ability to actively participate in planning and conducting investigations using tools safely.	Demonstrates minimal ability to actively participate in planning and conducting investigations using tools safely.
Observes, collects and records scientific data.	2C Collect data from observations using scientific tools. 2D Record and organize data using pictures, numbers, and words. 2E communicate observations and justify explanations using student-generated data from simple descriptive investigations. 2F Compare results of investigations with what students and scientists know about the world.		Demonstrates a solid ability to observe, collect, and record scientific data independently.	Demonstrates partial ability to observe, collect, and record scientific data independently.	Demonstrates minimal ability to observe, collect, and record scientific data independently.

	4A Collect, record, and compare information using tools, including ... (see TEKS). 4B Measure and compare organisms and objects.				
Makes predictions, justifies explanations, and draws conclusions based on data.	3A Identify and explain a problem and propose a task and solution for the problem. 3B Make predictions based on observable patterns. 3C Identify what a scientist is and explore what different scientists do.	Learners mirror the work of scientists by identifying real problems, using collected data to make predictions, and designing problem solutions.	Demonstrates a solid ability to make predictions, justify explanations, and draw conclusions based on data independently.	Demonstrates partial ability to make predictions, justify explanations, and draw conclusions based on data independently.	Demonstrates minimal ability to make predictions, justify explanations, and draw conclusions based on data independently.
Life Science					
Demonstrates understanding that plants/animals depend on their environment and each other to meet their basic needs.	9A Identify the basic needs of plants and animals. 9B Identify factors in the environment including temperature and precipitation that affect growth and behavior such as migration, hibernation, and dormancy of living things. 9C Compare the ways living organisms depend on each other and on their environments such as through food chains. 10A Observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs.	Learners conduct descriptive investigations of insects, including the life cycles, physical characteristics, environmental factors needed to meet the insects' needs, and describe interdependence within the insects' environments.	Demonstrates a solid understanding of how plants and animals depend on their environment to meet their basic needs.	Demonstrates partial understanding of how plants and animals depend on their environment to meet their basic needs.	Demonstrates minimal understanding of how plants and animals depend on their environment to meet their basic needs.
Identifies the parts of plants and describes	10B Observe, record, and compare how the physical characteristics of		Demonstrates a solid ability	Demonstrates partial ability	Demonstrates minimal ability to

their functions.	plants help them meet their basic needs such as stems carry water throughout the plant.		to identify the parts of plants and describe their functions.	to identify the parts of plants and describe their functions.	identify the parts of plants and describe their functions.
Identifies the stages in the life cycle of an insect.	10C Investigate and record some of the unique stages that insects undergo during their life cycle.		Demonstrates a solid ability to explain the stages in the live cycle of an insect.	Demonstrates partial ability to explain the stages in the live cycle of an insect.	Demonstrates minimal ability to explain the stages in the live cycle of an insect.
Earth Science					
Identifies and compares properties of natural resources, including rocks and sources of fresh and salt water.	7A Observe, compare, and describe rocks by size, texture, and color. 7B Identify and compare the properties of natural sources of freshwater and saltwater. 7C Distinguish between natural and manmade resources.	Learners design a presentation to describe the Earth's natural resources, how they are classified and used, how they differ from manmade resources and the importance of conservation of natural resources.	Demonstrates a sold ability to identify and compare properties of natural resources including rocks and fresh and saltwater sources.	Demonstrates partial ability to identify and compare properties of natural resources including rocks and fresh and saltwater sources.	Demonstrates minimal ability to identify and compare properties of natural resources including rocks and fresh and saltwater sources.
Identifies patterns and cycles in earth systems including the water cycle, weather, and the moon.	8A Measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data. 8B Identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation. 8C Observe, describe, and record patterns of objects in the sky, including the appearance of the moon.	Learners collect and record weather information over an extended period of time and compare it with weather maps and reports in the media during the same timeframe. Applying what they have learned about weather systems, the water cycle, and seasonal patterns, learners create a presentation that gives	Demonstrates a solid ability to identify patterns and cycles in earth systems including the water cycle, weather, and the moon.	Demonstrates partial ability to identify patterns and cycles in earth systems including the water cycle, weather, and the moon.	Demonstrates minimal ability to identify patterns and cycles in earth systems including the water cycle, weather, and the moon.

		scientific explanations about factors that may have contributed to the weather patterns that they observed.			
Physical Science					
Demonstrates that force causes change in motion.	<p>5A Classify matter by physical properties, including relative temperature, texture, flexibility, and whether material is a solid or liquid.</p> <p>5B Compare changes in materials caused by heating and cooling.</p> <p>5C Demonstrate that things can be done to materials such as cutting, folding, sanding, and melting to change their physical properties.</p> <p>5D Combine materials that when put together can do things that they cannot do by themselves such as building a tower or a bridge and justify the selection of those materials based on their physical properties.</p> <p>6A Investigate the effects on objects by increasing or decreasing amounts of light, heat, and sound energy such as how the color of an object appears different in dimmer light or how heat melts butter.</p>	<p>Conduct an investigation to observe and describe the physical properties of an object and describe how those properties change as the object is exposed to varying amounts of light, heat or sound and when the object is bent, folded, sanded or cut.</p> <p>Use a combination of materials to create a strong structure (building or bridge, for example). Explain how combining materials produced a stronger structure than would have been produced using only one material or item.</p>	Demonstrates a solid ability to classify matter based on properties and demonstrate that things can be done to change physical properties.	Demonstrates partial ability to classify matter based on properties and demonstrate that things can be done to change physical properties.	Demonstrates minimal ability to classify matter based on properties and demonstrate that things can be done to change physical properties.
Classifies matter based on properties and demonstrates that things can be done to change physical properties.	<p>6B Observe and identify how magnets are used in everyday life.</p> <p>6C Trace and compare patterns of movement of objects such as sliding, rolling, and spinning.</p>	Learners will create a game or toy that incorporates concepts of force and motion, magnetism, and changes in either light, heat, or sound energy. Scientific explanations of how each of	Demonstrates a solid ability to explain that forces cause change in motion.	Demonstrates partial ability to explain that forces cause change in motion.	Demonstrates minimal ability to explain that forces cause change in motion.

		these concepts is applied within the game will be included.			
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