Inquiry Skills	Biology TEKS Links
1. Set up a new, appropriate problem/application	2(A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology.
2. Pose relevant questions and develop hypotheses	2(A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology.
3. Make and test predictions	
4. Observations and measurements are accurate and appropriate	2(B) collect data and make measurements with precision.
5. Equipment is used properly with appropriate safety procedures	1(A) demonstrate safe practices during field and laboratory investigations.
6. Quality assurance procedures are employed (multiple, repeated readings; recalibration) and measurement errors are detected	
7. Specify measurements and variables	
8. Identify similarities and differences	
9. Explain reasons for differences	
10. Use appropriate mathematical procedures	
11. Infer patterns and trends	2(C) organize, analyze, evaluate, make inferences, and predict trends from data.
12. Explain data and relationships using evidence	2(C) organize, analyze, evaluate, make inferences, and predict trends from data.
13. Collect and organize data	2(B) collect data and make measurements with precision.
14. Use multiple forms to represent data	
15. Use models and simulations	3(E)evaluate models according to their adequacy in representing biological objects or events.
16. Communicate findings	2(D) communicate valid conclusions.

GLOBE ATMOSPHERE Science Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. The atmosphere has observable and/or measurable characteristics.	6(C) collect and evaluate global environmental data using technology	
2. Clouds can be categorized by observable features.		
3. Cloud cover and wind can affect atmospheric measurements.	2(B) collect data and make measurements with precision;	
4. Cloud types can be associated with certain weather patterns and used to predict the weather.	2© organize, analyze, evaluate, make inferences, and predict trends from data	
5. pH is a characteristic property that can be measured.	2(B) collect data and make measurements with precision;	
6. Heat energy transfers through radiation, conduction, and convection.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
7. Substances transfer heat energy at different rates.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
8. Some materials are good conductors of heat energy; some are good insulators of heat energy.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
9. The transfer of heat energy affects temperature.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
10. Substances expand and contract as the temperature changes.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
11. Classification helps to organize and understand the natural world.		8(A) collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys 8(B) analyze relationships among organisms and develop a model of a hierarchical classification system based on similarities and differences using taxonomic nomenclature 8 (C) identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals.
Atmosphere Enrichment Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Water has the unique property of expansion when changing from a liquid to a solid state.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment

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GLOBE HYDROLOGY Science Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Surface water exists in many forms and has observable and/or measurable characteristics.	2(B) collect data and make measurements with precision	
2. Surface water characteristics are related to the characteristics of the surrounding environment.		
3. A watershed guides water to a common watercourse.		
4. Watershed characteristics are related to the physical features of the land.		
5. The physical environment affects an organism's response patterns; organisms adapt and survive, move, or die.	12(C) compare variations, tolerances, and adaptations of plants and animals in different biomes 11(B) investigate and identify how organisms, including humans, respond to external stimuli	12(D) identify and illustrate that long-term survival of species is dependent on a resource base that may be limited 7(B) illustrate the results of natural selection in speciation, diversity, phylogeny, adaptation, behavior, and extinction 13(A) evaluate the significance of structural and physiological adaptations of plants to their environments
6. pH is a characteristic property that can be measured.	2(B) collect data and make measurements with precision	
7. Classification helps to organize and understand the natural world.		8(A) collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys; 8(B) analyze relationships among organisms and develop a model of a hierarchical classification system based on similarities and differences using taxonomic nomenclature 8(C) identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals. 10(C) analyze and identify characteristics of plant systems and subsystems.

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Hydrology Enrichment Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Macro-invertebrates are sensitive indicators of water quality.	11(D) summarize the role of microorganisms in maintaining and disrupting equilibrium including diseases in plants and animals and decay in an ecosystem	
2. Topographical maps provide 3-dimensional information about the land.		

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GLOBE SOILS Science Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Soil has observable and/or measurable properties that change with time and location.	2(B) collect data and make measurements with precision	
2. The interaction of organisms, climate, parent material, topography, and time affect soil properties.		9(D) analyze the flow of matter and energy through different trophic levels and between organisms and the physical environment
3. Soil acts as an insulating layer, creating a measurable temperature gradient.	2(B) collect data and make measurements with precision	
4. Environmental conditions affect the rate of decomposition in soil.	11(D) summarize the role of microorganisms in maintaining and disrupting equilibrium including diseases in plants and animals and decay in an ecosystem	
5. The chemical and physical properties of soils make different soils useful in different ways.		
6. pH is a characteristic property that can be measured.	2(B) collect data and make measurements with precision	
7. Classification helps to organize and understand the natural world.		8(A) collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys; 8(B) analyze relationships among organisms and develop a model of a hierarchical classification system based on similarities and differences using taxonomic nomenclature; 8(C) identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals.

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Soils Enrichment Concepts:	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. There are 12 soil textures representing different amounts of sand-, silt-, and clay-sized particles.		
2. A soil profile can be classified according to its properties, such as horizon, color, structure, consistency, texture, root and rock distribution, density, pH, carbonates, and fertility.	2(B) collect data and make measurements with precision	
3. Infiltration is the rate at which water flows into the ground; the rate changes depending on the level of soil saturation, soil texture and structure, and land cover.		

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GLOBE LAND COVER Science Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. A GLOBE Study Site has observable and/or measurable characteristics.	2(B) collect data and make measurements with precision	
2. A GLOBE Study Site represents a system with boundaries, and is a subset of the earth system.	10(C) analyze and identify characteristics of plant systems and subsystems	
3. Earth's land surface is covered by a variety of naturally occurring vegetated ecosystems.	10(C) analyze and identify characteristics of plant systems and subsystems	
4. The physical environment affects an organism's response patterns; organisms adapt and survive, move, or die.	12(C) compare variations, tolerances, and adaptations of plants and animals in different biomes 11(B) investigate and identify how organisms, including humans, respond to external stimuli	12(D) identify and illustrate that long-term survival of species is dependent on a resource base that may be limited 7(B) illustrate the results of natural selection in speciation, diversity, phylogeny, adaptation, behavior, and extinction 13(A) evaluate the significance of structural and physiological adaptations of plants to their environments
5. The magnetic needle of a compass is attracted to Earth's Magnetic North and to some metal objects that are nearby.		
6. Classification helps to organize and understand the natural world.		8(A) collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys; 8(B) analyze relationships among organisms and develop a model of a hierarchical classification system based on similarities and differences using taxonomic nomenclature; 8 (C) identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals.

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Land Cover Enrichment Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Remote sensing is a technique used to create visual representations of data.		
2. Image display is accomplished by conversion of stored data to a user-defined coded scheme and creating an image based on differences in measurement.		
3. Student remote sensing involves observations made without the use of touch (i.e., using eyes, ears, nose and skin surface).		

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GLOBE Seasons Science Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Seasonal changes can be observed.		
2. Seasonal changes follow an annual cycle. The magnitude of these changes varies from year to year.		
3. Seasonal patterns differ based on geographic location.		
4. Earth has many climate zones.		
5. Classification helps to organize and understand the natural world.		8(A) collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys; 8(B) analyze relationships among organisms and develop a model of a hierarchical classification system based on similarities and differences using taxonomic nomenclature; 8(C) identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals.
Seasons Enrichment Concepts	Biology Direct TEKS Link*	Biology InDirect TEKS Link*
1. Bud-break is the period when leaf buds appear and grow.	(C) analyze and identify characteristics of plant systems and subsystems	
2. Senescence is the period when actively growing plant material dies.	(C) analyze and identify characteristics of plant systems and subsystems	

GLOBE GPS Science Concepts	No Biology TEKS Links

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