

New Hampshire K-12 Science Curriculum Frameworks

BRSP-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Science As Inquiry																					
1a. Students will demonstrate an increasing understanding of how the scientific enterprise operates.						x	x	x	x			x	x		x	x	x	x	x	x	x
2. Science, Technology, and Society																					
2a. Students will demonstrate an increasing ability to use measuring instruments to gather accurate and/or precise information.							x					x	x								
2b. Students will demonstrate an increasing ability to use technology to observe nature.							x						x								
2c. Students will demonstrate an increasing ability to analyze, synthesize, and communicate scientific information using technology.					x			x	x			x	x		x	x	x			x	x
2d. Students will demonstrate an increasing ability to understand how technology is used to synthesize new products.																					
2e. Students will demonstrate an increasing ability to understand that science and technology can affect individuals, and that individuals in turn can affect science and technology.																	x	x			
2f. Students will demonstrate an increasing ability to understand that progress in science and technology is controlled by societal attitudes and beliefs.																	x	x			
3. Life Science																					
3a. Students will demonstrate an increasing ability to recognize patterns and products of evolution, including genetic variation, specialization, adaptation, and natural selection.																					
3b. Students will demonstrate an increasing ability to understand how environmental factors affect all living systems (i.e. individuals, community, biome, the biosphere) as well as species to species interactions.																					
3c. Students will demonstrate an increasing ability to understand that organisms are linked to one another and to their physical setting by the transfer and transformation of matter and energy to maintain a dynamic equilibrium.																	x	x			
3d. Students will demonstrate an increasing ability to understand fundamental structures, functions, and mechanisms of inheritance found in microorganisms, fungi, protists, plants, and animals.																					
4. Earth/Space Science																					
4a. Students will demonstrate an increasing ability to understand that the Earth is a unique member of our solar system, located in a galaxy, within the universe.	x				x								x						x	x	x
4b. Students will demonstrate an increasing ability to understand that the Earth is a complex planet with five interacting systems, which consist of the solid Earth (lithosphere), air (atmosphere), water (hydrosphere), ice (cryosphere), and life (biosphere).	x		x	x	x	x	x	x		x		x	x		x	x	x	x		x	x

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4c. Students will demonstrate an increasing ability to understand that the Earth contains a variety of renewable and non-renewable resources.							x									x	x	x			x	
5. Earth/Space Science																						
5a. Students will demonstrate an increasing ability to distinguish among materials by utilizing observable properties.																						
5b. Students will demonstrate an increasing ability to understand that matter is composed of dynamic interactive units or particles and that all the properties and changes in matter can be explained in terms of the forces involved in the interactions of these units.						x	x							x	x						x	
5c. Students will demonstrate an increasing ability to understand the relationships among different types and forms of energy.						x	x			x						x	x	x	x			
5d. Students will demonstrate an increasing understanding of how electrical and magnetic systems interact with matter and energy.																						
5e. Students will demonstrate an increasing understanding of how an unbalanced force exerted on an object causes a change in the state of rest or motion of that object in the direction of the unbalanced force.									x													
5f. Students will demonstrate an increasing understanding that energy can be transmitted by waves, using light and sound as examples.							x			x											x	
5g. Students will demonstrate an increasing understanding that heat is the product of many natural processes.						x				x			x						x	x		
6. Unifying Themes and Concepts																						
6a. Students will demonstrate an increasing ability to recognize parts of any object or system, and understand how the parts interrelate in the operation of that object or system.				x			x	x	x	x		x		x	x	x	x	x			x	x
6b. Students will demonstrate their understanding of the meaning of stability and change and will be able to identify and explain change in terms of cause and effect.							x		x	x					x	x	x	x			x	x
6c. Students will understand the meaning of models, their appropriate use and limitations, and how models can help them in understanding the natural world.					x		x		x	x				x	x		x	x			x	
6d. Students will increasingly quantify their interactions with phenomena in the natural world, use these results to understand differences of scale in objects and systems, and determine how changes in scale affect various properties of those objects and systems.							x		x				x									

Note: The complete text of the New Hampshire K-12 Science Curriculum Frameworks is available at <http://www.plymouth.edu/psc/math/curricula/frmindex.html>