

BSCS Science: *An Inquiry Approach*, Grades 6-11 Framework

Units	Major Concepts Addressed at Each Grade Level					
	6	7	8	9	10	11
Science as Inquiry	<ul style="list-style-type: none"> Scientifically testable questions 	Abilities necessary to do and understandings about scientific inquiry with a focus on:				<ul style="list-style-type: none"> Evidence as the basis for explanations and models Alternative explanations and models
	<ul style="list-style-type: none"> Design of scientific investigations Technology and math in scientific investigations 	<ul style="list-style-type: none"> Evidence and explanations 	<ul style="list-style-type: none"> Questions and concepts that guide scientific investigations 	<ul style="list-style-type: none"> Design of scientific investigations Communicating scientific results 		
Physical Science	<ul style="list-style-type: none"> Properties and changes of properties in matter Integrating chapter 	<ul style="list-style-type: none"> Motions and forces Integrating chapter 	<ul style="list-style-type: none"> Transfer of energy Integrating chapter 	<ul style="list-style-type: none"> Structure and properties of matter Structure of atoms Integrating chapter 	<ul style="list-style-type: none"> Motions and forces Chemical reactions Integrating chapter 	<ul style="list-style-type: none"> Interactions of energy and matter Conservation of energy and increase in disorder Integrating chapter
Life Science	<ul style="list-style-type: none"> Structure and function in living systems Reproduction and heredity Integrating chapter 	<ul style="list-style-type: none"> Diversity and adaptations of organisms Populations and ecosystems Integrating chapter 	<ul style="list-style-type: none"> Regulation and behavior Integrating chapter 	<ul style="list-style-type: none"> The cell Behavior of organisms Integrating chapter 	<ul style="list-style-type: none"> Biological evolution Molecular basis of heredity Integrating chapter 	<ul style="list-style-type: none"> Matter, energy, and organization in living systems Interdependence of organisms Integrating chapter
Earth-Space Science	<ul style="list-style-type: none"> Structure of the Earth systems Integrating chapter 	<ul style="list-style-type: none"> Earth's history Integrating chapter 	<ul style="list-style-type: none"> Earth in the solar system Integrating chapter 	<ul style="list-style-type: none"> Origin and evolution of the universe Origin and evolution of the Earth system Integrating chapter 	<ul style="list-style-type: none"> Geochemical cycles Integrating chapter 	<ul style="list-style-type: none"> Energy in the Earth system Integrating chapter
Science, Technology, and Society	<ul style="list-style-type: none"> Natural hazards Risks and benefits Abilities of technological design 	<ul style="list-style-type: none"> Personal health Populations, resources, and environments 	<ul style="list-style-type: none"> Science and technology in society Understandings about science and technology 	<ul style="list-style-type: none"> Personal and community health Natural and human-induced hazards Abilities of technological design 	<ul style="list-style-type: none"> Population growth Natural resources Environmental quality 	<ul style="list-style-type: none"> Science and technology in local, national, and global challenges Understandings about science and technology
	<p>History and Nature of Science addressed throughout grade levels and units</p> <ul style="list-style-type: none"> Science as a human endeavor Nature of science History of science 					