

JOS BMPs

NEXT GENERATION SCIENCE STANDARDS / MISSOURI LEARNING STANDARDS

<u>PHYSICAL SCIENCE</u>		Grade 9-12
PS1 - Matter and Its Interactions	A - Structure and Properties of Matter	9-12.PS1.A.1
		9-12.PS1.A.2
		9-12.PS1.A.3
		9-12.PS1.A.4
		9-12.PS1.A.5
	B - Types of Interactions of Matter	9-12.PS1.B.1
		9-12.PS1.B.2
		9-12.PS1.B.3
	C - Nuclear Process	9-12.PS1.C.1
PS2-Motion & Stability: Forces & Interactions	A- Forces and Motion	9-12.PS2.A.1
		9-12.PS2.A.2
		9-12.PS2.A.3
	B-Types of Interaction	9-12.PS2.B.1
		9-12.PS2.B.2
		HS-PS2.B.2
PS3 - Energy	A- Definitions of Energy	9-12.PS3.A.1
		9-12.PS3.A.2
		9-12.PS3.A.3
	B- Conservation of Energy and Energy Transfer	9-12.PS3.B.1
	C- Relationship Between Energy and Forces	9-12.PS3.C.1
	D- Energy in Chemical Process and Everyday	
PS4 - Waves and Their Applications in technologies for Information Transfer	A- Wave Properties	9-12.PS4.A.1
		HS-PS4-2
		9-12.PS4.A.2
	B- Electromagnetic Radiation PS4	9-12.PS4.B.1
		9-12.PS4.B.2
	C- Information Technologies and Instrumentation	

LIFE SCIENCE		Grade 9-12
LS1 - From Molecules to Organisms: Structure and Processes	A- Structure and Function	9-12.LS1.A.1
		9-12.LS1.A.2
		9-12.LS1.A.3
	B- Growth and Development of Organisms	9-12.LS1.B.1
	C-Organization for Matter & Energy Flow in Organisms	9-12.LS1.C.1
		9-12.LS1.C.2
		HS-LS1-6
	D- Information Processing	9-12.LS1.C.3
LS2-Ecosystems: Interactions, Energy, & Dynamics	A- Interdependent Relationships in Ecosystems	9-12.LS2.A.1
		HS-LS2-7
		HS-LS2-8
	B-Cycles of matter and Energy Transfer in Ecosystems	9-12.LS2.B.1
		9-12.LS2.B.2
		9-12.LS2.B.3
	C-Ecosystem Dynamics, Functioning and Resilience	9-12.LS2.C.1
		9-12.LS2.C.2
		HS-LS2-7
		HS-LS2-8
LS3 - Heredity: Inheritance & Variation of Traits	A- Inheritance of Traits	9-12.LS3.A.1
	B- Natural Selection	9-12.LS3.B.1
		9-12.LS3.B.2
		9-12.LS3.B.3
		9-12.LS3.B.4
	C- Adaptation	9-12.LS4.B.3
	D- Biodiversity and Humans	
LS4 - Biological Evolution: Unity and Diversity	A- Evidence of Common Ancestry and Diversity	9-12.LS4.A.1
		9-12.LS4.A.2
	B- Natural Selection	9-12.LS4.B.1
		9-12.LS4.B.2
	C- Adaption	9-12.LS4.C.1
		9-12.LS4.C.2
		9-12.LS4.C.3

<u>EARTH and SPACE SCIENCE</u>		Grade 9-12
ESS1 - Earth's Place in the Universe	A- The Universe and its Stars	9-12.ESS1.A.1
		9-12.ESS1.A.2
		9-12.ESS1.A.3
	B- Earth and the Solar System	9-12.ESS1.B.1
ESS2 - Earth's Systems	C- The History of Planet Earth	9-12.ESS1.C.1
		9-12.ESS1.C.2
	A- Earth Materials and Systems	9-12.ESS2.A.1
		9-12.ESS2.A.2
		9-12.ESS2.A.3
	9-12.ESS2.A.4	
	B- Plate Tectonics and Large-Scale Systems	
	C- The Role of Water in Earth's Surface Processes	9-12.ESS2.C.1
	D- Weather and Climate	9-12.ESS2.D.1
	E- Biogeology	9-12.ESS2.E.1
ESS3 - Earth and Human Activity	A- Natural Resources	9-12.ESS3.A.1
		9-12.ESS3.A.2
	B- Natural Hazards	
	C- Human Impacts on Earth's Systems	9-12.ESS3.C.1
		9-12.ESS3.C.2
	D-Global Climate Change	9-12.ESS3.D.1
		9-12.ESS3.D.2

<u>ENGINEERING TECHNOLOGY and the APPLICATION OF SCIENCE</u>		Grade 9-12
ETS1 - Engineering Design	A- Defining and Delimiting Engineering Problems	9-12.ETS1.A.1
		9-12.ETS1.A.2
	B- Developing Possible Solutions	9-12.ETS1.B.1
		9-12.ETS1.B.2
	C- Optimizing the Solution Process	