

Introductory Physical Science & Force, Motion, and Energy – Correlation with Oregon Science Standards

Common Curriculum Goals	Content Standards	Benchmark 3 (Grade 8)	IPS Ch. 1	IPS Ch. 2	IPS Ch. 3	IPS Ch. 4	IPS Ch. 5	IPS Ch. 6	IPS Ch. 7	IPS Ch. 8	IPS Ch. 9	IPS Ch. 10	IPS Ch. 11	IPS Ch. 12	FM&E Ch. 1	FM&E Ch. 2	FM&E Ch. 3	FM&E Ch. 4	FM&E Ch. 5	FM&E Ch. 6	FM&E Ch. 7
MATTER																					
Understand structure and properties of matter.	Understand structure and properties of matter.	Compare properties of specific substances.		X	X	X															
		Describe how to measure characteristic properties including boiling and melting points, solubility, and density.		X	X	X															
		Recognize that substances may be grouped by their physical properties.			X	X	X	X													
		Use the concept of density to evaluate which objects will float or sink in water.			X											X					
Understand chemical and physical changes.	Describe and analyze chemical and physical changes.	Compare physical and chemical changes.																			
		Distinguish between examples of chemical changes and physical changes.			X	X	X	X													
		Describe processes that will separate the components of physical mixtures.					X														
		Describe events that accompany chemical changes, but not physical changes.						X													
		Explain how our understanding of the nature of matter and chemical reactions has changed over time.						X													
FORCE																					
Understand fundamental forces, their forms, and their effects on motion.	Describe fundamental forces and the motions resulting from them.	Explain interactions between force and matter and relationships among force, mass, and motion.													X		X				X
		Recognize and describe the motion of an object based on its mass and the force exerted on it.													X		X				X
		Predict the change in direction or speed of an object by changing the forces acting on it.															X				
		Explain inertia.																			
		Recognize that every object exerts gravitational force on every other object.													X						X
		Describe the effect of gravitational force on objects at the Earth's surface.													X						X

