

*Introductory Physical Science (7<sup>th</sup> and 8<sup>th</sup> editions) & Force, Motion, and Energy – Alignment with South Carolina Science Curriculum Standards*  
Grade 7 – November 2005

Standard	Indicators	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	IPS7	FM	FM	FM	FM	FM	FM	FM
		IPS8 Ch. 1	IPS8 Ch. 2	IPS8 Ch. 3	IPS8 Ch. 4	IPS8 Ch. 5	IPS8 Ch. 6	IPS8 Ch. 7	IPS8 Ch. 8	IPS8 Ch. 9	IPS8 Ch. 10	Ch. 11	Ch. 12	Ch. 1	Ch. 2	Ch. 3	Ch. 4	Ch. 5	Ch. 6	Ch. 7
<b>Scientific Inquiry</b> 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.	1. Use appropriate tools and instruments safely and accurately when conducting a controlled scientific investigation.		X X	X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X	X
	2. Generate questions that can be answered through scientific investigation.	X X	X X	X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X	X
	3. Explain the reasons for testing one independent variable at a time in a controlled scientific investigation.		X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X	X	X
	4. Explain the importance of that repeated trials and a well-chosen sample size have with regard to the validity of a controlled scientific investigation.		X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X	X	X
	5. Explain the relationships between independent and dependent variables in a controlled scientific investigation through the use of graphs, tables and charts.		X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X	X	X

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	6. Critique a conclusion drawn from a scientific investigation.	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X
	7. Use appropriate safety procedures when conducting investigations.	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X	X	X	X	X	X	X	X	X
<b>Chemical Nature of Matter</b> 7-5: The student will demonstrate an understanding of the classification and properties of matter and the changes that matter undergoes.	1. Recognize that matter is composed of extremely small particles called atoms.							X X												
	2. Classify matter as element, compound, or mixture on the basis of its composition.					X X														
	3. Compare the physical properties of metals and non metals.																			
	4. Use the periodic table to identify the basic organization of elements and groups of elements.									X										
	5. Translate chemical symbols and the chemical formulas of common substances to the component parts of the substance.									X										
	6. Distinguish between acids and basis and use indicators to determine their relative pH.																			
	7. Identify the reactants and products in chemical equations.	X X	X X	X X	X X	X X	X X					X X	X X							

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	8. Explain how a balance chemical equation supports the law of conservation of matter.																			
	9. Compare the physical properties of matter to the chemical property of reactivity with a certain substance.																			
	10. Compare physical change to chemical changes that are the result of chemical reactions.																			