

Readorium Alignment to FOSS Kit: Interactions of Matter		
Readorium Books By Standard	Magazine Articles (A) and Science Alive Videos (V) By Standard	Teacher Resource Center Classroom Strategy Lessons (CL) with Articles (A) by Standard
<p><b>NGSS: 6-8-PS1.A. Matter and Its Interactions: Structure and Properties of matter:</b> Each pure substance has characteristic physical and chemical properties (for any bulk quantity under given conditions) that can be used to identify it. (MS-PS1-2), (MS-PS1-3)</p> <p>Gases and liquids are made of molecules or inert atoms that are moving about relative to each other. (MS-PS1-4)</p> <p>In a liquid, the molecules are constantly in contact with others; in a gas, they are widely spaced except when they happen to collide. In a solid, atoms are closely spaced and may vibrate in position but do not change relative locations. (MS-PS1-4)</p>		
<ul style="list-style-type: none"> <li>• Chemical and Physical Properties of Matter 1</li> <li>• Chemical and Physical Properties of Matter 2</li> <li>• Formation of Volcanoes</li> <li>• Lights Sound Action</li> <li>• Plate Tectonics</li> <li>• Weather</li> <li>• Pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Crime Scene Science(A)</li> <li>• Matter Matters(A)</li> <li>• Splash(A)</li> <li>• The Water Cycle(A)</li> </ul>	<ul style="list-style-type: none"> <li>• Determining Importance (CL-3, A-2 Crystals)</li> </ul>
<p><b>NGSS: 6-8-PS1.B. Matter and Its Interactions: Chemical Reactions:</b> Substances react chemically in characteristic ways. In a chemical process, the atoms that make up the original substances are regrouped into different molecules, and these new substances have different properties from those of the reactants. (MS-PS1-2), (MS-PS1-3), (MS-PS1-5)</p>		
<ul style="list-style-type: none"> <li>• Chemical and Physical Properties of Matter 1</li> <li>• Chemical and Physical Properties of Matter 2</li> <li>• The Formation of Volcanoes</li> </ul>	<ul style="list-style-type: none"> <li>• Cafeteria Chemistry: How to Play with Your Food and Astound Your Friends (A)</li> <li>• Crystals (A)</li> <li>• Gold - The Magnificent Metal (A)</li> <li>• Kitchen Chemistry (A)</li> <li>• The Cool World of Chemistry (A)</li> <li>• Excuse me, but burping is natural(A)</li> <li>• The Science of Movie Stunts(A)</li> </ul>	<ul style="list-style-type: none"> <li>• Creating Sensory Images (CL-1, A-2 Kitchen Chemistry)</li> <li>• Determining Importance (CL-3, A-2 Crystals)</li> </ul>
<p><b>NGSS: 6-8-PS3.A. Energy: Definitions of Energy:</b> Temperature is a measure of the average kinetic energy of particles of matter. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present. (MS-PS3-3), (MS-PS3-4)</p> <p>The term “heat” as used in everyday language refers both to thermal motion (the motion of atoms or molecules within a substance) and radiation (particularly infrared and light). In science, heat is used only for this second meaning; it refers to energy transferred when two objects or systems are at different temperatures. (secondary to MS-PS1-4)</p> <p>Temperature is not a measure of energy; the relationship between the temperature and the total energy of a system depends on the types, states and amounts of matter present. (secondary to MS-PS1-4)</p>		
<ul style="list-style-type: none"> <li>• Lights Sound Action</li> <li>• Sports Physics</li> <li>• Newton’s Laws</li> </ul>	<ul style="list-style-type: none"> <li>• Weapons Older than Dirt: The History of Some of the World's Most Ancient Weapons (A)</li> <li>• Things That Go BOOM!: The History and Chemistry of Explosives (A)</li> </ul>	