

Grade 9 Lab Notebook

## Science in Action 9

Index of Investigations, Challenges and Activities

### Matter and Chemical Change

Investigations	Activity	Title	Page Ref.
QuickLAB		Foam in a Cup	91
<b>1.0 Matter can be described and organized by its physical and chemical properties.</b>			
Skill Practice		Safety in the Science Lab	93
QuickLAB		Organizing the Properties of Matter	97
QuickLAB		Observing a Physical Change	98
<b>Inquiry</b>	<b>B-1</b>	<b>Identifying Mystery Substances</b>	100-101
Skill Practice		Identifying Physical and Chemical Changes	105
<b>Inquiry</b>	<b>B-2</b>	<b>Investigating Physical and Chemical Changes</b>	106-107
<b>2.0 An Understanding of the nature of matter has developed through observations over time.</b>			
Give It A Try		Creating a Time Line Story of Matter	113
QuickLAB		Meet the Elements	122
Skill Practice		Using the Periodic Table	129
<b>Inquiry</b>	<b>B-3</b>	<b>Building A Periodic Table</b>	130-131
Skill Practice		Exploring Patterns in the Periodic Table	133
<b>3.0 Compounds form according to a set of rules</b>			
Skill Practice		Make A Model of an Atom	139
QuickLAB		Common Chemicals in Your Home	140
Skill Practice		Working with Compounds	142
QuickLAB		Using Batteries to Investigate a Chemical Reaction	145
<b>Inquiry</b>	<b>B-4</b>	<b>Modelling Ionic Compounds</b>	148
QuickLAB		Ionic or Molecular Compound?	150
<b>Inquiry</b>	<b>B-5</b>	<b>Modelling Molecular Compounds</b>	151
<b>4.0 Substances undergo a chemical change when they interact to produce different substances.</b>			
QuickLAB		Rocket Science	157
Give It A Try		Identify The Reaction	158
<b>Inquiry</b>	<b>B-6</b>	<b>Observing Chemical Reactions</b>	159
<b>Experiment on your Own</b>	<b>B-7</b>	<b>Reactions for Upset Stomachs</b>	161
<b>Inquiry</b>	<b>B-8</b>	<b>Conserving Mass</b>	164
QuickLAB		Hydrogen Peroxide & the Catalyst Mang. Dioxide	167
<b>Inquiry</b>	<b>B-9</b>	<b>Rates of Reaction</b>	168
<b>SCIENCE WORLD</b>			
<b>Case Study Issue</b>		<b>Metal Contamination of the Environment</b>	173
<b>Project</b>			
<b>End of Unit Project</b>		<b>What's In The Bottle?</b>	174