## Science 9 – Unit B Matter and Chemical Change

Outcome	Activity title / description	Notes	Non- Consumable materials	Consumable materials	School provided materials
1	Identifying Mystery Substances	SA9 p. 100-101	Spot plates, magnifying lens, conductivity tester, goggles	Salt, baking soda, cornstarch, sugar, sodium nitrate, sodium thiosulfate, water, acetic acid, iodine soliton	Black paper, toothpicks
1	Pure substances, solutions and mechanical mixtures				
1,2	Investigating physical vs chemical change	SA9 p. 106-107	250 mL beaker, 5 mL measuring spoon, stirring rod, 3 test tubes, test tube holder, tongs	Sodium carbonate, hydrochloric acid, aluminum foil, sugar, candle, matches, sodium carbonate solution, copper(II) sulfate solution, copper (II) sulfate solid	Water
1	Observing Chemical Reactions	SA 9 p. 159	3 test tubes Test tube holder Thermometer 500 mL beaker Stirring rod	Matches, Sulfuric acid (1.0 M), Magnesium ribbon, Splint Copper(II)sulfate (0.2 M), Steel wool, Iron (III) chloride (0.2M), Sodium hydroxide (0.8 M), 5g baking	

				soda, Vinegar	
2	Factors that affect rate of reaction	S.A. p. 168 – different version	250 mL beakers, stopwatch, hotplate, mortar and pestle, test tube rack, 6 test tubes, test tube brush, 50 mL graduated cylinder	Alka-Seltzer tablet, 3% hydrogen peroxide, sugar, salt, baking soda, yeast, manganese dioxide, liquid soap	water
2	Conservation of Mass	S.A. p. 164	250 ml flask, stopper, test tube, balance, 250 mL beaker, graduated cylinder	Sodium carbonate solution, calcium chloride solution, sodium bicarbonate, hydrochloric acid	string
2	Endo and Exothermic reactions		Stopwatch 100 mL Beaker Thermometer 50 mL graduated cylinder	Baking soda Vinegar Steel wool	Plastic baggie Index card
3	Ionic and molecular compounds	S.A. p. 150	100 mL beakers Distilled water Scoopula Watch glass Stirring rod Conductivity tester	Sodium chloride, Ethanol, Calcium chloride, Vinegar, Sulphur, Sucrose, Paraffin wax, Copper(II)sulfate, Ammonium chloride, Distilled Water	

4	Modelling molecular and ionic compounds	S.A. p. 148 and 151	Large marshmallows, small marshmallows, colored marshmallows, toothpicks	