Science 9 – Unit C Environmental Chemistry

Outcome	Activity title / description	Notes	Non- Consumable materials	Consumable materials	School provided materials
1	Testing Organic Molecules	See SA 9, p. 200-201	Medicine droppers Small test tubes Hot water bath Stir sticks	Water Benedict's solution Biuret solution Iodine Glucose Corn starch Vegetable oil Potato piece Gelatin / albumin Sucrose Spot plate Brown paper	
2	Identifying Acids and Bases	See SA 9, p. 192	test tube test tube rack	Water dilute acid dilute base blue litmus paper red litmus paper phenolphthalein unknown samples "A" – "G"	pH cabbage juice
2	Neutralizing Acids	See SA 9, p. 194	2x50 mL beaker Measuring spoon 50 mL graduated cylinder	Water pH paper pH meter blue litmus red litmus dilute acid dilute base baking powder	

1	One in a million!	See SA 9, p. 217	Spot plate, 2 eye droppers, 50 mL beaker	Food coloring, toothpicks, distilled water	
2	Telltale Creatures - Identifying aquatic invertebrates	See SA 9, p. 215	Magnifying glass, microscope, depression slides, petri dish, hand lens, medicine dropper	Methyl cellulose solution	Pond sample
1,2	Dissolved Oxygen	See SA9, p. 218	Dissolved oxygen kit 50 mL graduated cylinder 100 mL baker Jar with lid	Boiled water	
1	Phosphates – Foggy Water	See SA 9, p. 220	Test tubes Test tube holder Medicine dropper	Various water samples Sodium phosphate solution (TSP) Ammonium hydroxide solution Magnesium sulfate solution	** Use a variety of water samples, i.e. pond water, water with detergent , water with fertilizer, etc.
3	Acid Rain and Soil	See SA 9, p. 240	100 mL graduated cylinder, 2 x 250 mL beakers, Plastic funnel, Retort stand and ring, pH meter, stopwatch, hand lens	Sand, Potting Soil, Peat Moss Clay / loam soil, Vinegar (diluted), pH paper	
3	Bury Your Garbage	See SA9, p. 245 ** Student design	Balance, Ruler Heat lamp, Thermometer, Refrigerator	Potting soil, Types of waste materials to test, Clear plastic cups, Popsicle sticks	Plastic wrap / baggies, water