

Supplies included in this kit:**Complete instruction manual.****Equipment:**

9-volt battery
15mL, 30mL, 150mL plastic beakers
50mL glass beaker
Capillary tubes
Chromatography paper
Conductivity apparatus
Cotton swabs
Electrolysis device
Felt-tip pen with black, water-soluble ink
10mL plastic graduated cylinder
1.0mL measuring spoon
Graduated, mini, and thin stem pipets
Plastic toothpicks
96-well reaction plate
24-well reaction plate
Rubber bands
15 cm ruler
Safety goggles
Fine sandpaper
Spring clamp
6 x 50 mm test tubes
12 x 75 mm test tubes
Celsius thermometer (-10° to 102°C)
Washing bottle
Wire gauze
Wood splints
Lab Manual

Chemicals and other supplies:

Acetic acid, 0.1 M solution
Calcium nitrate, 0.1 M solution
Copper nitrate, 0.1 M solution
Hydrochloric acid, 0.1 M solution
Lead nitrate, 0.1 M solution
Potassium Hydroxide, 0.1 M solution
Potassium iodide, 0.1 M solution
Sodium acetate, 0.1 M solution
Sodium hydroxide, 0.1 M solution
Sodium oxalate, 0.1 M solution
Sodium sulfate, 0.1 M solution
Sodium thiosulfate, 0.1 M solution
Zinc nitrate, 0.1 M solution
Magnesium sulfate
Potassium hydrogen phthalate
Cetyl alcohol
Palmitic acid
Bromophenol blue indicator
Glycerin
Phenolphthalein indicator paper
Universal indicator paper

Metals:

Copper

Lead

Nickel

Zinc

Lab Experiments in the kit correlated with Apologia's *Exploring Creation with Chemistry*:

1. Paper Chromatography (to be used with Apologia's Module 4)
2. Melting Points, Super Cooling (Module 4)
3. Electrical Conductivity of Several Solutions (Module 3)
4. Mole Ratios (Module 6)
5. Double Replacement Reactions (Module 11)
6. Oxidation-Reduction (Module 16)
7. Decomposition (Module 5)
8. Boyle's Law (Module 12)
9. Charles's Law (Module 12)
10. Solubility Product Constant (Module 11)
11. PH and PH Indicators (Module 15)
12. A Microscale Titration (Module 10)
13. Molar Mass by Titration (Module 10)
14. A Buffer Solution (Module 10)
15. Reaction Rates: The Effect of Concentration (Module 13)
16. Reaction Rates: The Effect of Temperature (Module 14)
17. Electrochemistry: Galvanic Cells (Module 16)