Introduction to Chemistry—
Master Materials Guide

Materials listed below are recommended for a class of 30 students working in pairs.

Experiments and Demonstrations§

Chemicals	Flinn Scientific Catalog No.	Observation and Experiment	Introduction to Measurement	Discovering Density	Beverage Density Lab	Separation of a Mixture	What Is a Chemical Reaction?	Acid in the Eye	Reading Volumes	Mass vs. Density	Classifying Matter	A Burning Candle
Aluminum foil	A0019						1 sheet					
Aluminum shot	A0262						25 g					
Ammonium hydroxide solution, 3 M	A0193						15 mL					
Brass shot	B0234			500 g								
Calcium chloride dihydrate	C0018	400 g										
Cupric chloride solution, 0.5 M	C0381						250 mL					
—or—												
Cupric chloride dihydrate	C0281						21 g					
Ethyl alcohol	E0012									400 mL		
Hydrochloric acid solution, 3 M	H0034						100 mL*					
Hydrochloric acid solution, 6 M	H0033							10 mL				
Iron filings	I0011					75 g						
Magnesium ribbon	M0139						15 cm					
Phenol red, 0.02% aqueous solution	P0101	500 mL										
—or—												
Phenol red	P0097	0.1 g										
Sand, fine white	S0003					75 g						
Silver nitrate solution, 0.1 M	S0305						75 mL					
—or—												
Silver nitrate	S0274						1.7 g					
Sodium bicarbonate (baking soda)	S0043	250 g					2 g					
Sodium bicarbonate solution, saturated	S0267							10 mL				
Sodium carbonate solution, 1 M	S0234						10 mL†					
—or—												
Sodium carbonate monohydrate	S0054						3.1 g					
Sodium chloride (salt)	S0063					75 g						
Sodium hydroxide solution, 6 M	S0242						15 mL*	10 mL				
—or—												
Sodium hydroxide pellets	S0074						4.0 g					
Sucrose (table sugar)	S0134				250 g							
Zinc, mossy	Z0003						15 g					
Zinc shot	Z0017			500 g								

*Dilute to prepare 2 M solution.

Continued on next page

†Dilute to prepare 0.5 M solution.

§Many of these experiments and demonstrations will be adapted into student laboratory kits. Consult your current *Flinn Scientific Catalog/Reference Manual* for kit availability.

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Glassware												
Beakers												
50-mL	GP1005	30	15			30						
100-mL	GP1010			15	15				1			
150-mL	GP1015						15					
600-mL	GP1030									2		
Graduated cylinders												
10-mL	GP2005	15	1				15					
25-mL	GP2010		16	15								
100-mL	GP2020		16						1			
500-mL	GP2030		1						1			
1000-mL	GP9090		1									
Pipets, 10-mL	GP7059				15							
Test Tubes, 12 × 75 mm	GP6062					45	15					
Flasks, Erlenmeyer, 125-mL	GP3040				15		15		1			
Buret, 50-mL	GP1090								1			
General Equipment and Miscellaneous												
Bags, zipper-lock	AB1003	90				15						
Balance, centigram (0.01 g precision)	OB2059		3	3	3	3	3					
Bottles, jars, or sample containers	AP4790	30										
Candle, paraffin wax	AP4835									1		1
Filter paper, to fit funnels	AP3103					15						
Funnel, standard stem, polypropylene	AP8838					15						
Food dyes	V0003		optional						optional			
Hot plate	AP8386					3						
Laboratory Techniques Guide, pkg of 50	AP6248				1	1						
Litmus paper, blue	AP7923						1 vial					
Magnet	AP9266					15						
Measuring spoons, set	AP9284	15				15						
Metric ruler	AP5386		15									
Overhead projector	AP4430							1			1	
Permanent marker	AP1297							1				
Petri dish	AP8170							1			9	

Continued on next page

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General Equipment and Miscellaneous, cont'd.												
Pipet bulb	AP8607				15							
—or—												
Pipet filler	AP1887				15							
Pipets, Beral-type, graduated	AP1721						75	3				
Reaction plate, 24-well	AP1447						15					
Ring stand	AP8228					15						
Rings	AP1065					15						
Rubber stoppers	AP2227						15					
Spatulas	AP8336					15	15					
Stirring rods	GP5075					15						
Thermometers, digital	AP6049						15					
Tongs	AP8236						15			1		
Wash bottles	AP8108	15				15	15					
Watch glasses	GP8009									2		
Weighing dishes	AP1278			75		45						
Water, distilled or deionized	W0007	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Wax pencil◆	AP8292	15		15								

◆Or other pens for labeling.