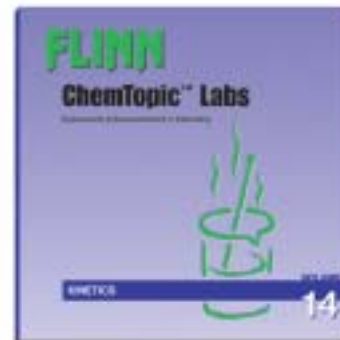


Kinetics— Master Materials Guide



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

Experiments and Demonstrations

Chemicals	Flinn Scientific Catalog No.	Introduction to Reaction Rates	Temperature and Reaction Rates	The Order of Reaction	Kinetics of Dye Fading	Determining a Rate Law	Iodine Clock Reaction	Now You See It—Now You Don't	Sloppy Kinetics	The Pink Catalyst	The Floating Catalyst
Acetic acid, 6 M	A0186			3 mL							
Alconox® detergent	A0126							20–25 g			
Catalase	C0359									0.1 g	
Cobalt chloride	C0225								4–5 g		
Copper wire, 18 gauge	C0148		6 m								
Dextrose, anhydrous	D0002	18									
Ethyl alcohol, anhydrous	E0007				20 mL						
Hydrochloric acid, 1 M	H0057		2 L			500 mL					
Hydrogen peroxide, 30%	H0037							77 mL			
Hydrogen peroxide solution, 6%	H0028								40 mL		
Hydrogen peroxide solution, 3%	H0009			23 mL				20 mL		1 L	
Magnesium ribbon	M0139		4 m								
Malonic acid	M0091							5 g			
Manganous sulfate	M0030							2 g			
Methylene blue —or— Methylene blue solution, 1%	M0072 M0074	1 g 10 mL*									
Phenolphthalein solution, 1%	P0019				5 mL						
Potassium bromate	P0205							4 g			
Potassium hydroxide	P0058	59 g									
Potassium iodide	P0066		2 g								
Potassium iodide solution, 0.2 M	P0168						325 mL				
Potassium sodium tartrate	P0084								6 g		
Sodium acetate	S0344		2 g								
Sodium hydroxide, pellets	S0074				1 g						
Sodium iodide	S0083							15 g			
Sodium metabisulfite	S0317						4 g				
Sodium thiosulfate pentahydrate	S0114		1 g			75 g					
Spray starch	S0302			1							
Starch, soluble	S0122						4 g				
Sulfuric acid, conc., 12.5 M	S0380							48 mL			
Sulfuric acid solution, 0.1 M	S0419						10 mL				

* Dilute 1/10

Continued on next page

Kinetics— Master Materials Guide



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

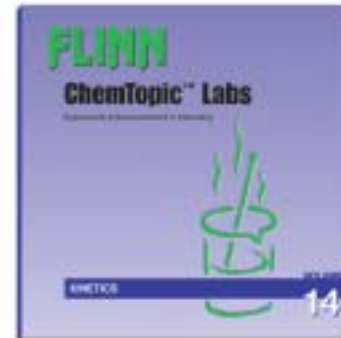
Experiments and Demonstrations

	Flinn Scientific Catalog No.	Introduction to Reaction Rates	Temperature and Reaction Rates	The Order of Reaction	Kinetics of Dye Fading	Determining a Rate Law	Iodine Clock Reaction	Now You See It— Now You Don't	Sticky Kinetics	The Pink Catalyst	The Floating Catalyst
Glassware											
Beakers											
50-mL	GP1005			15		45				1	
150-mL	GP1015	20*									
250-mL	GP1020						6				
400-mL	GP1025		15–20*				6				
600-mL	GP1030									1	4
1-L	GP1040							1			
Graduated cylinders											
10-mL	GP2005	15					1		3		
50-mL	GP2015		15				1				
100-mL	GP2020						1			1	1
250-mL	GP2030								3		
500-mL	GP2030								3		1
Stirring rod	GP5075						1			1	1
Test tubes											
15 × 125 mm	GP6015	45									
18 × 150 mm	GP6067		90								
General Equipment and Miscellaneous											
Balance, centigram	OB2059						1	1			
Cassette box	AP1519			15							
Colorimeter sensor	TC1504				15						
Cotton swabs	AP1737			30		60					
Cuvettes with lids	AP9149				15						
Demo tray, large, plastic	AP5429								1		
Evaporating dish	AP1272										1
Filter paper, 5.5 cm diam.	AP8994										4
Forceps —or— Tongs	AP8328 AP1359										1
Hot plate	AP4674	3–5 *	5–6*				1			1	
Labeling pens	AP1297	15				15					

*Several groups may share beakers to make water baths at different temperatures.

Continued on next page

Kinetics— Master Materials Guide



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

Experiments and Demonstrations

	Flinn Scientific Catalog No.	Introduction to Reaction Rates	Temperature and Reaction Rates	The Order of Reaction	Kinetics of Dye Fading	Determining a Rate Law	Iodine Clock Reaction	Now You See It—Now You Don't	Silly Kinetics	The Pink Catalyst	The Floating Catalyst
General Equipment and Miscellaneous, cont'd.											
Labels, adhesive	AP5368			60							
Lab Pro™ Interface System	TC1500				15						
Lighter, butane	AP8960							1			
Logger Pro™ software	TC1421				1						
Magnetic stirrer	AP6067					1			1		
Magnetic stir bar	AP1090						1		1		
Pipets											
Beral-type, thin stem	AP1444	60									
Beral-type, microtip	AP1517			60							
Reaction plates, 6-well	AP1725					15					
Reaction strips, 12-well	AP1446			30							
Ruler, metric	AP6324	15	15								
Scoop	AP8338							1	1		
Stoppers											
Size 0	AP2222	45									
Size 3, one-hole	AP2303		30								
Stopwatch —or— Timer	P1572 AP8874	15	15	15		15	1				1
Syringe, 3-mL	AP1728					15					
Test tube rack	AP1319	15	15								
Thermometer, digital	AP6049	15	15		15		1			1	
Tissues or lens paper, lint-free	AP1141				15						
Toothpicks, plastic	AP1810			60							
Wash bottle	AP1668	15			15	15					
Water, distilled or deionized	W0007 W0001	✓		✓	✓	✓	✓			✓	✓
Weighing dishes, plastic	AP1278						3				
Wooden splints	AP4444							1			