

Flinn Scientific Advanced Inquiry Labs for AP* Chemistry

Table of Contents

Preface	iv
Investigations	
1. Analysis of Food Dyes in Beverages.....	1
2. Percent Copper in Brass	15
3. Gravimetric Analysis of Calcium and Hard Water	29
4. Acidity of Beverages.....	45
5. Separation of a Dye Mixture Using Chromatography.....	61
6. Qualitative Analysis and Chemical Bonding	77
7. Green Chemistry Analysis of a Mixture	93
8. Analysis of Hydrogen Peroxide.....	111
9. Separating a Synthetic Pain Relief Mixture	125
10. Rate of Decomposition of Calcium Carbonate	139
11. Kinetics of Crystal Violet Fading.....	153
12. Designing a Hand Warmer	173
13. Applications of LeChâtelier's Principle	189
14. Acid–Base Titrations	209
15. Buffers in Household Products.....	227
16. Properties of Buffer Solutions.....	239
Curriculum Framework Learning Objectives and Alignment	257
Safety and Disposal Guidelines	258
Master Materials List	260