## • Table of Contents

Introduction—Please Read This First	1
Investigation 1: Ammoniacal-Nitrogen in Fertilizer	4
Investigation 2: Nitrate Determination in Soil Samples	8
Investigation 3: Analysis of Raisin Bran	. 13
Investigation 4: Sub-Sampling Heterogeneous Solids	. 14
Investigation 5: Statistical Model of Sample Reduction	. 17
Investigation 6: Determination of the Concentration of Vitamin C in the Peel, Pulp, and Juice of an Orange	19
Investigation 7: Factors That Affect the Grinding Process	23
Investigation 8: Percent Recovery and Sample Carryover in Grinding	27
Investigation 9: Investigating Mixtures	. 30
Investigation 10: Effective Mixing	. 32

