

# List of ALEKS® Virtual Labs



## 1st Lab Tutorial

- Chemistry Virtual Labs Tutorial

## Buffers

- Buffers and Buffer Capacity

## Calorimetry

- Enthalpy of Neutralization
- Heat Capacity of a Calorimeter

## Carbohydrates

- Testing for Starch
- Testing of Sugars

## Chemistry Lab Safety

- Personal Safety

## Colligative Properties

- Freezing-Point Depression

## Density

- Density of a Plastic Cube

## Electrochemistry

- Standard Reduction Potentials and Concentration Dependencies

## Enzymes

- Effects of Concentration and Temperature

## Equilibrium

- Equilibrium Constant (Spectrophotometry)

## Gas Law

- Diffusion and Graham's Law
- Ideal Gas Law Constant

## Kinetics

- Iodine Clock Reaction

## Lab Skills

- Determining melting point, boiling point and refractive index
- Using a Balance
- Using a Graduated Cylinder
- Using an Alcohol Thermometer
- Using a Pipet and Buret
- Using a Ruler
- Using Simple and Fractional Distillation to Separate Binary Liquid Mixture
- Using Volumetric Glassware for Dilutions

## Molecular Models

- VSEPR

## Osmosis

- Movement of Water across a Semipermeable Membrane

## pH

- Antacids

## Proteins

- Testing for Amino Acids and Polypeptides

## Reactions

- Reactions in Solution
- Reactions in Solution (Blancing Equations)

## Scientific Method

- Pillbug Preference

## Solubility

- Qualitative Analysis

## Spectrophotometry

- Apply Beer's Law to Determine Concentration of Dye

## Stoichiometry

- Synthesis of Calcium Carbonate
- Synthesis of Soap and its Properties

## Titration

- Concentration of Vinegar
- Identify Weak Acid using Titration Curve
- Standardization of Sodium Hydroxide