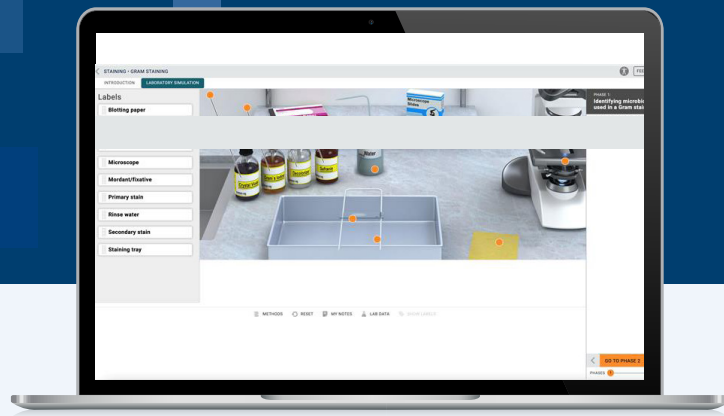


A Realistic Simulated Lab Experience Chemistry

Your students will be better prepared for lab, more efficient, and retain more of the fundamental skills necessary for a successful laboratory experience.



1st Lab Tutorial:

- Virtual Labs Tutorial

Buffers:

- Buffers and Buffer Capacity

Calorimetry:

- Enthalpy of Neutralization
- Heat Capacity of a Calorimeter

Carbohydrates:

- Testing of 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:

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

Kinetics:

- Iodine Clock Reaction

Lab Skills:

- Column Chromatography
- Determining Melting Point, Boiling Point and Refractive Index
- Gas Chromatography
- Miniscale Extraction and Recrystallization
- Paper Chromatography
- Thin-Layer Chromatography
- Using a Balance
- Using a Graduated Cylinder
- Using a Pipet and Buret
- Using a Ruler
- Using an Alcohol Thermometer
- Using Simple and Fractional Distillation to Separate Binary Liquid Mixture
- Using Volumetric Glassware for Dilutions

Osmosis:

- Movement of Water Across a Semipermeable Membrane

pH:

- Antacids

Proteins:

- Testing for Amino Acids and Polypeptides

Reactions:

- Reactions in Solution
- Reactions in Solution (Balancing 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

VSEPR:

- Molecular Modeling

Virtual Labs makes a positive impact on student success.

With simple setup for instructors and easy navigation for students, our accessible simulations and assessment content create a genuine lab experience for all students.

“I can complete the labs at my own pace and not feel rushed or left behind. If needed, I can also repeat a part of the lab to better understand it and further practice.”

Student, St. Louis Community College

www.bit.ly/thelabisalwaysoopen »

Enhance your Chemistry course in a variety of ways, including:

- Accessible Lab Solution
- Online Lab Courses
- Pre-Lab Preparation
- Post-Lab Review
- Online Lab Supplement