POGIL Laboratory Activities for Chemistry – Activity Descriptions

3D - Is this molecule 3D?

Calorimetry, experimental design. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

TY - Are we there yet?

Chemical equilibrium. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

TC - Do all titration curves look the same?

Acid-base titrations. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

SL - How slow does it flow?

Viscosity, vapor pressure, surface tension. Lewis structures and molecular shapes. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

SD - Which salts dissolve?

Solubility rules, ionic equations. Lewis structures and molecular shapes. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

3D - Is this molecule 3D?

Lewis structures and molecular shapes. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

CI - Why does the can implode?

Gas properties. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

CP - How do cold packs work?

Free energy and spontaneity. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

FE - Do I need more iron in my diet?

The scientific process. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

HP - How pure is it?

Melting points of solids and mixtures. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

NM - Can nonmetals be magnetic?

Electron configuration, paramagnetism, diamagnetism. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.

RO - Which one runs out first?

Stoichiometry, limiting reactants. This guided inquiry laboratory experience is built for students to get reliable data with appropriate facilitation and includes Pre- and Post-Experiment Questions along with the actual experimental method to be followed during a typical three-hour lab period.