



Dear Parent or Guardian of EMS ISD Advanced Chemistry Students,

Welcome to the 6<sup>th</sup> six weeks in Advanced Chemistry!

We would like to take this opportunity to share with you what your child will learn during this six-week period. The following standards will be covered, and students will be expected to do the following:

- Describe the postulates of kinetic molecular theory
- Describe and calculate the relations between volume, pressure, number of moles, and temperature for an ideal gas as described by Boyle's law, Charles' law, Avogadro's law, Dalton's law of partial pressure, and the ideal gas law
- Describe energy and its forms
- Describe the law of conservation of energy and the processes of heat transfer in terms of calorimetry
- Classify reactions as exothermic or endothermic using chemical equations
- Perform calculations involving heat, mass, temperature change, and specific heat.
- Describe factors affecting reaction rate.
- Describe equilibrium reactions as reversible and formulate equilibrium expressions.
- Understand LeChatlier's Principle

Along with many other labs, Advanced Chemistry students will complete an Argument Driven Inquiry Lab with real world application. Using information students learn regarding thermodynamics, students will determine which chemical could make the best cold pack. Emphasis will continue to focus on critical reading, designing experiments, collecting data, analyzing data, evaluating arguments, providing peer feedback, and writing conclusions.

It is our hope that your child has learned critical thinking skills, safe scientific practices, communication skills and planning and implementing scientific design along with building a strong chemistry foundation. Thank you for sharing your child with us this year and best of luck next year.

Sincerely,

Eagle Mountain-Saginaw Advanced Chemistry Teachers

