

Name:

Pd:

Unit 2 Study Guide – Energetics and Gas Laws

Learning Target	How am I doing with this? Write down evidence!
I can identify the three types of energy transfer in real-life situations.	
I can describe the different forms of energy and provide examples of each.	
I can identify the different segments of the electromagnetic spectrum by wavelength and/or frequency when given a diagram.	
I can accurately perform metric conversions when given the metric chart.	
I can identify the parts of an electromagnetic wave.	
Know the major phases of matter and how they compare to each other in terms of energy	
Know how to explain visually how particles are different (spacing, etc.) between the phases of matter	
Know the six (6) major phase changes (by name)	
Know whether a phase change occurs because of an increase or a decrease in energy	
Be able to read and interpret phase change diagrams and phase diagrams showing the three phases with triple point	
Know how to determine melting and boiling points at a given pressure on a phase diagram	
Know what the kinetic molecular theory states and how it relates to phases of matter	

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Know the three major gas variables and how they are created (i.e. pressure = collisions; temperature = kinetic energy, etc.)	
Know how adjusting gas variables (temperature, pressure, volume) can affect the gas in a container	
Know where to find the combined gas law formula on your placemat	
Be able to adjust and interpret the formula to solve for variables of P, V, + T.	
Be able to convert between Celsius and Kelvin temperatures	
Be able to connect the combined gas law to real life situations (i.e. why you shouldn't heat up a metal can, etc.)	

Write down any information you struggled with in the space below to review again:

Remember, 10-15% of this exam may consist of questions and topics from Unit 1 - Fundamentals of Chemistry. Write down anything you struggled with from Unit 1 below: