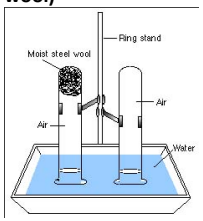
Flint Community Schools
9th Grade Physical Science
Topics-at-a-Glance
Revised July 2014

	Course	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May/June
9th HS	**Physical Science/ Honors Physical Science***	Safety/Measure-ment/Scientific Method/ States of Matter Conversions	Atomic Structure/ Molecular Theory/Periodic Table & Law/Families	Chemical Reactions/ Formulas/Balancing Equations Nomenclature Bonding	Chemical Reactions/ Acid/Bases Nuclear Reactions	Motion/Force Linear Vectors	Forces Work Power	Circular Motion KE/PE Energy Transformations	Electricity/Magnetis m/Electrical Energy Waves	Waves Sound Light
Labs to look for		**-measurement lab** **-Calculate area of a circle** **-Calculate the volume or density** **-number of water drops a penny can hold** **Phase change lab:** **-does cold water boil faster than hot water?**	**Activity: 3D atomic models** **Lab: classify/identify conductors, semi conductors, and insulators**	**--ID if a change is physical or chemical at different stations (and why)** **Chemical Reactions: polymer lab (borax)** **-Rust lab (steel wool)**  **-Bonding- crystal lab or snowflake lab (borax or salt and sugar)**	**-Acid and base testing using pH strips or cabbage juice** **-what is the most effective antacid? Notice the pH of different solutions before and after antacid is added**	**-Speed / Velocity lab (determine speed or velocity of an object)**	**-Find the relationship between the speed of a car and the distance a body goes upon impact without a seatbelt (Newton's 1st)** **-Lab stations to determine which of Newton's laws is prominently displayed and why.** **-Step lab**	**-Mechanical Energy lab: Drop a ball from the floor, desk, and top of student's head and calculate PE and KE (uses scientific notation)** **-Activity: lab stations where students tell type of energy before and after a transformation** **-Pendulum lab**	**-Make an electromagnetic motor** **-Students create and analyze series and parallel circuits** **-Make a magnet (wire wrapped nail-solenoid. Students are to pick up a minimum of 15 paper clips)**	**-Slinky labs** **-Ripple tanks** **-Activity-Old school cup telephones** **-decimeters (if available) to determine loudness in areas of the building/ of the group** **-Reflection lab** **-Light addition lab (use flashlights and color cellophane to add colors/ mix colors) can also use light boxes.**

Revised July 2015 by Trombley