

Ms. Regina's Physics Content Calendar Outline

Below is a list of the content we will be covering during the school year. **Please keep in mind that units may shift and we will potentially add to this list

Unit and Project Area	Content Learned
Measurements/ Engineering Design Process August - September	<ul style="list-style-type: none">-Importance of engineering failures-Scientific Method-Define Physics-Basic Measurements-English units-Metric units-Intro to scale drawings-Intro creating engineering drawings
Energy & Forces November & December *Sketchup and 3d modeling	<ul style="list-style-type: none">-Law of Conservation of Energy-The 7 types of energy-Energy transformations-Work-Power-Forces-Newton's Laws-Acceleration-Renewable Energy-Nonrenewable Energy-Elemental components
Electronics January - February	<ul style="list-style-type: none">-Defining electronics-Basics of an electron-Creating a basic circuit-Solving for resistors in a $V=IR$-Understanding resistors in series-Understanding resistors in parallel-Solving for complex circuits-Understand basic capacitors-Designing simple circuits with given voltage or desired-Drawing engineering schematics of self designed circuitry-Reverse engineering
Fluids/ Pressure/ Force March-May *Build time!	<ul style="list-style-type: none">-Define fluid flow-Define forces-Define pressure-Basic understanding-Solve for formulas of pressure and forces-Buoyancy-Bernoulli's Principle