Test Design Blueprint **Date___12/29/14_____**

_____Physics I Honors_____ _____2003390_____ _____11 & 12 _____
Course Title Course Number Grade(s)

Main Idea *(Big Idea/Domain/Strand/Standard)*	**Standard Code**	**Percent of Test Based on Time Devoted to Standard**	**Number of Test Questions** *(60 total)*
Scientific method: function of models in science.	SC.912.N.3.5	3%	2
Scientific method: scientific information is open to change	SC.912.N.2.4	1%	1
Describe the motion of an object. Explain velocity and acceleration.	SC.912.P.12.2	5%	3
Relationship between distance, time, and energy.	SC.912.P.12.9	1%	1
Scientific Method	SC.912.N.1.1	3%	2
Connection between Kepler and Newton's laws and its effect on the Earth, moon, and the sun.	SC.912.E.5.6	3%	1
Newton's three laws of Motion.	SC.912.P.12.3	8%	5
Forms of energy and how it is transformed from one to another.	SC.912.P.10.1	3%	2
Four fundamental forces: gravitational, electromagnetic, weak nuclear, and strong nuclear	SC.912.P.10.10	2%	1
Law of Conservation of Energy	SC.912.P.10.2	3%	2
Compare and contrast work and power.	SC.912.P.10.3	3%	2
Speed of light and its relationship to matter.	SC.912.P.12.7	4%	2
Electromagnetism and the relationship between frequency, wavelength, and energy.	SC.912.P.10.18	6%	4
Relationship between current, voltage, resistance, and power.	SC.912.P.10.15	2%	1
Properties of waves.	SC.912.P.10.20	7%	4
Relate static charge to electric fields, electric force, electric potential, and potential energy.	SC.912.P.10.13	4%	2
Relationship between current, voltage, resistance, and power.	SC.912.P.10.15	4%	2
Differentiate between conductors, semiconductors, and insulators.	SC.912.P.10.14	4%	2
Difference between scalar and vector quantities.	SC.912.P.12.1	3%	2

Scientific Inference linked to observation (scientific method) Creativity in constructing scientific questions, methods, and explanations.	SC.912.N.1.6 SC.912.N.1.7	1% 1%	1
Scientific Laws describe scientific relationships. Difference between a scientific law and a scientific theory.	SC.912.N.3.3 SC.912.N.3.4	1% 1%	1
Explain linear momentum and the relationship with collisions between particles or objects.	SC.912.P.12.5	2%	1
Explain the effect of gravitational force between 2 objects. Distribution of matter in the universe and forces between them.	SC.912.P.12.4 SC.912.E.5.2	1% 1%	1
Structure of the atom.	SC.912.P.8.4	3%	2
Atomic Theory: the atomic model and how it changes over time. Similar investigations lead to similar outcomes.	SC.912.P.8.3 SC.912.N.1.5	1% 1%	1
Convection, conduction, and radiation and the connection of heat to states of matter.	SC.912.P.10.4	1%	1
The four states of matter Properties of water and Earth's sustainability due to its properties.	SC.912.P.8.1 SC.912.L.18.12	1% 1%	1
Oscillating magnetic and electric fields.	SC.912.P.10.17	1%	1
Ray diagrams for thin lens and mirror equations.	SC.912.P.10.22	2%	1
Angular momentum	SC.912.P.12.6	1%	1
Examples of pseudoscience Explain what characterizes science and its methods. Background of scientists influence scientific inferences. Science knowledge informs society of how to make decisions.	SC.912.N.2.3 SC.912.N.1.2 SC.912.N.2.5 SC.912.N.4.1	0.2% 0.2% 0.2% 0.4%	1
Relate temperature to average kinetic energy. Potential energy diagrams	SC.912.P.10.5 SC.912.P.10.6	1% 1%	1
Endothermic and Exothermic Efficiency and entropy Connect radiation with electromagnetic spectrum	SC.912.P.10.7 SC.912.P.10.9 SC.912.P.10.8	1% 1% 1%	1
Quantization of energy at the atomic level.	SC.912.E.5.8	1%	1

Frequency in sound waves.	SC.912.P.10.21	1%	1
Relationship between moving charges and magnetic fields. Theory of Relativity and how it relates to Newton's Laws.	SC.912.P.10.16 SC.912.P.12.8	1% 1%	1
Historical development of atomic theory. Scientific theory; a culmination of science investigations. Relationship between science, art, religion, and philosophy	SC.912.N.3.2 SC.912.N.3.1 SC.912.N.2.2	0.4% 0.4% 0.2%	1
TOTALS		100 %	60

List All Common Course Teachers:

Wendy Reister_____ _ _____ _____

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