6th Grade School Year at a Glance

Suggested Time Frame			
1st Nine Weeks	**2nd Nine Weeks**	**3rd Nine Weeks**	**4th Nine Weeks**
Lab Safety **Nature of Science** **SC.6.N.1.1**- Scientific Investigation **SC.6.N.1.2**- Repetition/Replication **SC.6.N.1.3**-Scientific explanation in other field **SC.6.N.1.4**-Comparing Results **SC.6.N.1.5**-Creativity **SC.6.N.2.1**- Distinguishing Science **SC.6.N.2.2**- Durable knowledge **SC.6.N.2.3**-Various Backgrounds **SC.6.N.3.1**- Theories / law **SC.6.N.3.2** - Scientific Law **SC.6.N.3.3**- Examples of Scientific Laws **SC.6.N.3.4**- Models **Topic #7** **Living Things in the Biosphere** **SC.6.L.14.6**-Types of infectious agents **SC.6.L.15.1**- Classifying organisms *** SC.6.N.1.1**- Scientific Investigation ****Start Topic #8 in the first 9 weeks.** ***6 Weeks total**	**Topic #8** **Cells & Cell Systems** **SC.6.L.14.1**- Hierarchical Organization **SC.6.L.14.2**- Cell Theory **SC.6.L.14.3**- Cell Processes **SC.6.L.14.4**-Structure and Function **SC.6.L.14.5**-Body Systems ***SC.6.N.1.1**- Scientific Investigation ***SC.6.N.3.4**- Models **Topic #3** **Introduction to Earth Systems** **SC.6.E.6.2**- Different Landforms **SC.6.E.7.4**- Interactions among systems ***SC.6.N.1.1**- Scientific Investigations ***SC.6.N.3.4**- Models **Topic #6** **Earth's Surface Systems** **SC.6.E.6.1**-Earth's Surface built up/torn down ***SC.6.N.1.1** Scientific Investigation ***SC.6.N.2.3**- Various Backgrounds ***SC.6.N.3.4**-Models	**Topic #4** **Energy in the Atmosphere & Ocean** ***SC.6.E.7.1***- 3 types of Heat Transfer **SC.6.E.7.3**-Global Patterns influence weather **SC.6.E.7.5**- Sun Influences global patterns **SC.6.E.7.8**-Hazardous Weather **SC.6.E.7.9**-Composition and Structure of the Atmosphere ***SC.6.N.1.1**-Scientific Investigations ***SC.6.N.1.5**- Creativity in Science ***SC.6.E.N.3.4**- Models **Topic #5** **Weather & Climate** **SC.6.E.7.2**-Cycling of Water **SC.6.E.7.3**-Global Patterns influence weather **SC.6.E.7.6**-Differentiate weather/climate **SC.6.E.7.7**-Natural Disasters **SC.6.E.7.8**- Protect Hazardous Weather ***SC.6.N.1.1**- Scientific Investigations ***SC.6.N.1.4**- Comparing Results ***SC.6.N.2.2**- Durable Knowledge ***SC.6.N.2.3**-Various Backgrounds ***SC.6.N.3.4**-Models	**Topic #1** **Energy** **SC.6.P 11.1**- Law of Conservation of energy ***SC.6.N.1.1**- Scientific Investigation ***SC.6.N.3.4**- Models **Topic #2** **Forces & Motion** **SC.6.P.13.1**-Investigate forces **SC.6.P.13.2**- Law of Gravity **SC.6.P.13.3**-Unbalanced forces **SC.6.P.12.1**- Measure/Graph distance vs. time ***SC.6.N.3.2**- Scientific Law ***SC.6.N.3.3**- Examples of Laws **Human Growth & Development** **HE.6.C.1.4 –** Health Problems and Concerns

*Nature of Science Standards embedded throughout the year

Bold = Parent Standards based on FLDOE Item Specs

7th Grade Year at a Glance

Suggested Time Frame			
1st Nine Weeks	**2nd Nine Weeks**	**3rd Nine Weeks**	**4th Nine Weeks**
Lab Safety **Nature of Science** **SC.7.N.1.1**- Experimental Design **SC.7.N.1.2**- Repetition vs Replication **SC.7.N.1.3**-Experiment vs Investigation **SC.6.N.1.4**- Variables (Independent and Dependent) **SC.7.N.1.5**- Different Methods of Investigation by Field **SC.7.N.1.6**- Scientific Evidence **SC.7.N.1.7**- Scientific Sharing and Debate **SC.7.N.2.1**-Charcteristics of Scientific Knowledge **SC.7.N.3.1**-Theories and Laws **SC.7.N.3.2**-Scientific Models **Topic #1** **Thermal Energy and Heat Flow** **SC.7.P.11.2**-Forms of Energy and Energy Transformations **SC.7.P.11.3**-Conservation of Energy **SC.7.P.11.1**-Heat and Temperature **SC.7.P.11.4**-Heat Flow *SC.7.N.1.1- Experimental Design ****Start Topic #2**** **4 Weeks Total**	**Topic #2** **Waves and Light** **SC.7.P.10.3**- Wave Properties **SC.7.P.10.1**- Electromagnetic Spectrum **SC.7.P.10.2**- Reflect, Refract, Absorb *SC.7.N.1.3-Experiment/Investigation *SC.7.N.1.4- Variables **Topic #5** **Geological Time** **SC.7.E.6.4**- Geological time **SC.7.E.6.3**- Age of Earth *SC.7.N.1.7-Debate **Topic #3** **Earth's Layers** **SC.7.E.6.1**- Earth's Layers **SC.7.E.6.2**- Rock Cycle *SC.7.N.3.2- Models ****Mid Year Progress Monitoring/Mid Term**** **1 Week**	**Topic #4** **Plate Tectonics** **SC.7.E.6.5**- Plate Tectonic Theory and Evidence **SC.7.E.6.7**- Heat Flows/Movement within Earth *SC.7.N.3.1-Theory *SC.7.N.3.2- Models **Topic #6** **Human Impacts on the Environment** **SC.7.E.6.6**- Human Impacts *HE.7.C.1.3 Environmental Factors Affecting Personal Health **Topic #7** **Heredity and Reproduction** **SC.7.L.16.3**- Meiosis and Mitosis (Sexual and Asexual Reproduction) **SC.7.L.16.1**- DNA and Other Genetic Material **SC.7.L.16.2**- Punnett Square/Pedigrees **SC.7.L.16.4**- Biotechnology *SC.7.N.1.7- Debating Science *SC.7.N.2.1-History of Science *SC.7.N.3.2- Scientific models	**Topic #8** **Diversity and Evolution** **SC.7.L.15.1**- Fossil Evidence and Theory of Evolution **SC.7.L.15.2**- Natural Selection **SC.7.L.15.3**-Adaptation *SC.7.N.3.1- Theories /Laws *SC.7.N.1.7- debate/ confirmations *SC.7.N.2.1- scientific knowledge changes **Topic #9** **Ecosystems** **SC.7.L.17.2**-Interdependent Relationships **SC.7.L.17.1**-Energy Flow in Ecosystems **SC.7.L.17.3**-Dynamic and Resilient Ecosystem *SC.7.N.1.3-Experiment/Investigation *SC.7.N.1.4- Variables *SC.7.N.1.2- Replication/ Repetition **Human Growth & Development** **HE.7.C.1.8**-Unhealthy/Risky Behavior **HE.7.C.1.3**-Environmental Factors/ Health

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8th Grade Year at a Glance

Suggested Time Frame

1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks
Lab Safety **Nature of Science** ***SC.8.N.1.1***- Scientific method ***SC.8.N.1.2***- Repetition/Replication ***SC.8.N.1.3***- Scientific vocabulary ***SC.8.N.1.4***- Hypotheses ***SC.8.N.1.5***-Scientific explanation in other fields ***SC.8.N.1.6***- Scientific investigation ***SC.8.N.2.1***- Pseudoscience ***SC.8.N.2.2***- Durable knowledge ***SC.8.N.3.***1- Theories / law ***SC.8.N.3.2***- Modified theories **Topic 1** **Earth-Sun-Moon System** **SC.8.E.5.4** - Law of Universal Gravitation **SC.8.E.5.8** - Heliocentric/Geocentric Models of Solar System **SC.8.E.5.9** - Impact of Objects in Space **Topic 2** **Solar System and the Universe** **(cont. 2nd 9 weeks)** **SC.8.E.5.1** - Distances in Space **SC.8.E.5.2** - Galaxies **SC.8.E.5.3** - Relationship among astronomical bodies **SC.8.E.5.4** - Law of Universal Gravitation **SC.8.E.5.5** - Properties of Stars **SC.8.E.5.6** - Solar Properties **SC.8.E.5.7** - Properties of the Solar System **SC.8.E.5.10** - Technology in Science **SC.8.E.5.11** - Electromagnetic Spectrum **SC.8.E.5.12**- Space exploration & Florida ***SC.8.N.4.1***- Science for decision making	**Topic 2: Solar System and the Universe** **(cont. from 1st 9 weeks)** **Topic 3** **Intro to Matter** **SC.8.P.8.2**- Weight vs Mass **SC.8.P.8.3**- Density **SC.8.P.8.4**- Physical Properties ****SC.7.N.3.2*** - Scientific models ****SC.7.N.1.6***- Empirical evidence **SC.8.P.9.1**- Law of Conservation of Mass **SC.8.P.9.2**- Physical/ Chemical Change **SC.8.P.9.3** - Temp/ chemical change ****SC.8.N.1.6***- Scientific investigations ****SC.7.N.1.7***- Debate & confirmation **Topic 4** **Solids, Liquids, and Gases** **SC.8.P.8.1** - Atomic Theory/solid, liquids, and gases **SC.8.P.8.4** - Physical Properties of Matter ****Progress Monitoring/Mid Term Exam****	**Topic 5** **Atoms and the Periodic Table** **SC.8.P.8.7**- Atomic Theory (subatomic) **SC.8.P.8.5**- Elements **SC.8.P.8.8**- Properties of Compounds **SC.8.P.8.9**- Mixtures/Substance ****SC.8.N.3.2***- Theories- modified ****SC.7.N.2.1*** - New evidence **SC.8.P.8.6**- Periodic tables ****SC.6.N.3.1***- Theories **Topic 6** **Chemical Reactions** **SC.8.P.8.4** - Physical Properties of Matter **SC.8.P.8.9** - Solutions and Pure Substances **SC.8.P.9.1** - Law of Conservation of Mass **SC.8.P.9.2** - Physical and Chemical Changes **SC.8.P.9.3** - Temperature and Chemical Changes ****SC.8.N.4.2***- Politics, society, economy and science	**Topic 7** **Organisms, Energy, and Matter** **SC.L.18.1** - Photosynthesis **SC.L.18.2** - Cellular Respiration **SC.L.18.3** - Carbon Cycle **SC.L.18.4** - Law of Conservation of Matter and Energy **FCAT Benchmark Review** Earth & Space Standards Life Science Standards Physical Science Standards Nature of Science Standards **End of the Year Project/Cumulative Review** **Human Growth and Development** **HE.8.C.1.2** **HE.8.C.1.4** ****Progress Monitoring/Final Exam****

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