U. C. Schools Curriculum Map

Subject: Grade Level:

Time Period	August	September	October	November
Big Ideas	Sound and Light Ch. 2 all sections *Ch. 4 Sec 3,4, & 5 *Ch. 1 all sections *Ch. 3 all sections **How does the ear hear?** **How do we see colors?** **What are the properties of waves?** **How are waves used in our world?**	Sound and Light –con't	Simple Machines *Ch. 4 all sections **What is the numerical advantage of a simple and compound machine?**	**Inside Earth** *Ch. 1 all sections *Ch.3 all sections *Ch.4 Sec 3 **How do the layers of our earth affect earthquakes and volcanoes?**
Content	*Characteristics of Waves *Sound *The Electromagnetic Spectrum *Light		*What is work? *Mechanical Advantage and Efficiency *Simple Machines *Machines in the human body	*Layers of the earth *Forces within the earth
Benchmarks and Skills	IV4.HS.1 – Relate characteristics of sound that we hear to properties of sound waves. (wavelength, amplitude, frequency) IV.4.HS.2 – Explain how we see colors of objects. IV.4.HS.3 – Describe waves in terms of their properties., wavelength, IV.4.HS.4 -Describe different types of waves and their technological applications.		IV.3.MS.5 – Design strategies for moving objects by application of forces, including the use of simple machines. Explain how simple machines provide a mechanical advantage. Choose the simple machine that will do the job most efficiently	V1HS1 – Understand the layers of the earth (core, mantle, lithosphere, hydrosphere, atmosphere, and the processes involved in their formation. -Understand that maps provide evidence of the movement of major plates and associated earthquake activity. -Describe the forces within the earth as compression, tension, or shearing and resulting activity – earthquakes, volcanoes, mountain building and sea floor spreading. -Identify plate boundaries as lines of earthquakes on a world earthquake map. -Relate the movement of major plates with resulting volcanic

				activity on a map.
Assessments	Lab: Speed of Sound Lab: Slinky Lab: Applications of Sound Test Ch. 1 Test Ch. 2 Book on Hearing Test Ch. 3 Test Ch. 4		Student design and build compound machine	Test Ch. 5 Posters of rock decomposition Posters of Great Lake regions Test over sun Technology journal Student Tutorial - computer 2-D scaled earth drawing 3-D scaled earth project

Continued: Subject___Science_____ Grade___8th___

December	January	February	March	April	May
Earth-con't	Cells & Heredity *Ch. 1 all sections *Ch. 2 all sections	**Chemical Building Blocks**	**Astronomy**	**Science Fair**	Five-Kingdom system
	*Discovering Cells *Looking Inside Cells *Chemical Compounds of cells *The Cell in Its Environment *Photosynthesis *Respiration *Cell Division *Cancer **How do cells reproduce and grow?** **Why do I look the way I do?**	*Particles of Matter **What are the properties of the subatomic particles?** **How do atoms bond?**	**What are conditions like on other planets?**		**If a new organism was discovered, where would it belong?**
	III.1.HS.1 – Explain how multicellular organisms grow, based on how cells grow and reproduce. (meiosis and meitosis) III.3.HS.1 – Explain how characteristics of living things are passed on from generation to generation.	IV.1.HS.3 – Recognize that elements differ in their number of protons, electrons, and neutrons. -Identify the parts of an atom -Describe the electrical charges of the subatomic particles -Explain the difference between atomic mass and atomic number of an atom SCI.II.1.HS.2 – Show how common themes of science, math, and	V.4.HS.1 Explain how info received from satellites has either confirmed or modified scientific theories concerning conditions on other planets V.4.HS.4 Technology and scientific inquiry over time have helped us to learn about the universe. -Analyze the processes of geology and the weather of planets and moons. -Analyze the process by which		III.2.HS.1 – Classify major groups of organisms on the basis of the five-kingdom system .

		technology apply in real world contexts. SCI.1.HS.4 – Gather and synthesize information from books and other sources of information.	geological and weather info is gathered from planets and moons		
Assessments:	Posters on personal inherited traits Test Ch. 3&4 Student Tutorial - computer Poster: Meiosis and meitosis Test Ch. 1 Test Ch. 2 Student Tutorial - computer	Lab: Where's the Evidence Lab: Chemical Reactions Making Periodic Tables Test Ch. 1 Test Ch. 2 Take Home Essay questions Student Tutorial - computer		Science Fair Projects	Student Tutorial – computer RAFT-A day in the life of a…