GRADE SIX SCIENCE CURRICULUM MAP

	Content	Skills	Assessment	Activities/Resources
August	• Form + function of life in inter-tidal zone • Physical & chemical properties of water • Scientific Method	• Observe animals in inter-tidal zone • Research specific animal explaining how it lives and its relationship to other creatures • Lab reports	• Lab reports	• Iceberg lab • Salinity lab • Internet
September	• Continue work on inter-tidal zone • Ocean floor • Food chain of ocean animals • Food web o ocean animals • Abiotic/biotic inter-dependency • Human interaction with the aquatic environment • Currents	• Research food chain of ocean creature • Mapping ocean floor • Create poster of food chain • Connect food chains to form food web • Read, “What is an Ecosystem?” • Construct ecosystem	• Reports given to class • Quizzes • Project • Observations of ecosystems • Unit test	• Shadow box • 3D ocean floor • Camp Bourndale • Squid dissection • Mrs. Sosik’s unit on ocean life • Mapping currents • Thermohaline experiment • Ocean rescue unit • Internet • Videos • Text “Earth’s Ecosystems” • Text “Ocean’s in Motion

	Content	Skills	Assessment	Activities/Resources
October	• Photosynthesis • Nitrogen cycle • Carbon cycle • Water cycle • Biomes s stable environments • Recycling	• Observe interdependency of Abiotic and biotic parts of ecosystem in ecocolumn • Explain photosynthesis • Graph temperature and precipitation data • Interpret graphs • Research characteristics of biomes • Recycling sorting and collecting	• Cartoon of photosynthesis • Quizzes • Biome project	• "Raindrop Journey" • Recycling Club • Act out nitrogen cycle (teacher made) • Diagram cycles • Text "Earth's Ecosystems" • Videos • Internet • Ecocolumns • Letters to companies regarding recycling
November	• Population changes • Predator/prey relationships • Lab report: controls and variables • Human interactions with ecosystems • Global warming	• Observe populations of plants and animals in ecocolumn • Gather data of life in ecocolumn resulting from human interaction • Write lab report on effects of pollutant on ecocolumn	• Quizzes • Notebooks • Lab report: Effects of pollutants on life in ecocolumn • Power Point	• Earth's Ecosystems text • STC: Life in Ecosystems • Computers • Quizzes • Recycling • Videos: An Inconvenient Truth, Six Degrees, After the Warming

	Content	Skills	Assessment	Activities/Resources
December	• Interaction of populations • Producers, consumers and decomposers • Energy flow through community • Symbiosis • Succession	• Distinguish between producers, consumers and decomposers • Explain energy flow through a community • Need for decomposers and scavengers • Identify symbiotic relationships • Explain primary and secondary succession • Distinguish the differences between pioneer communities and climax communities	• Owl pellet project • Quizzes • Cartoon of succession either primary of secondary	• "Oh Deer" game • Owl pellets • "Earth's Ecosystems" text • Symbiosis card game "project wild"
January	• Mass vs. Weight • Mass of various objects • Mixtures vs. Chemical reaction • Volume of objects • Density of objects	• Measure solids and liquids using a scale • Observe mixtures • Observe and compare mixtures of different solubilities • Relate concentrations of a material to different solid material dissolved in volume of water • Define density	• Lab reports • Writing and reading science sections • Quizzes	• FOSS mixtures and solutions Units 1-3 • GEMS designing density

	Content	Skills	Assessment	Activities/Resources
February	• Elements and compounds • Periodic table of elements • Chemical formulas • Atoms and molecules • Physical and chemical changes	• Mix combinations of solid materials resulting in chemical reactions • Differentiate between chemical and physical reactions using formulas • Research periodic table • Write chemical formulas	• Quizzes • Labs • Test • Research element from periodic table project	• FOSS mixtures and solutions • Computers • Create periodic table of our own
March	• Potential and kinetic energy • Temperature change • Heat transfer melting and boiling points	• Observe potential energy being changed into kinetic energy • Observe heat s an energy transfer • Formulate a working model of thermometer • Explain various thermometers based on melting and boiling points	• Labs • Quizzes	• Alterative Energy video • Power point • Creating thermometers • Computers

	Content	Skills	Assessment	Activities/Resources
April	• Phase change • Motion of an object • Force and speed	• Explain molecular behavior during a phase change • Observe how an object moves and describe changes of motion	• Quizzes • Labs • Test	• STC Motion and Design • Computer activities • Diagrams to illustrate force, motion and speed
May	• Speed • Outside forces • Speed vs. velocity • Distance vs. time graphs • Isaac Newton and laws	• Define speed • Measure time it took a vehicle to move a given distance • Observe effect of friction • Explain the difference between speed and velocity • Graph constant speed • Use formula for calculating speed	• Quizzes • Science notebooks • Test	• Motion and Design STC • Energy, Forces and Motion; Houghton Mifflin • Marble activity

	Content	Skills	Assessment	Activities/Resources
June	• Technology and design • Steps in engineering process • Elements of a universal system model • Describe and explain parts of a structure	• Solve design problems • Research problem • Brainstorm solutions in groups • Construct prototype • Test and redesign	• Project presentation • Notebooks	• STC Motion and design • Popsicle stick bridges