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|  | August (3 wks) | September (4 weeks) |  | October  (3 weeks) | November  (3 ½ weeks) | | December  (3 weeks) |  |
| 8th Grade  General  Science | Weather & Climate (3-4 weeks)   * Weather v/s Climate * Carbon Cycle * GreenHouse Effect * Data Collection * Carbon Footprints * Climate Change | Human Impacts (3-4 weeks   * Natural Hazards * Mitigation Technologies * Engineering Design to minimize human impact * Human Population and Consumption of Natural Resources | Fall  Break | Interdependent Relationships in Ecosystems (3 weeks)   * What is a Watershed? * Water Purification * Chemical Assessments * Biological Assessments * Creek Restoration/Engineering Design | Matter & Energy in Organisms & Ecoysystems (1-2 weeks)   * Construct and Argument * Research papers | | Earth’s Systems (2-3 weeks)   * Renewable v/s Nonrenewable resources * Energy Sources | Christmas Break |
| Environmental  Science | Weather & Climate (6 weeks)   * Chemistry of Carbon * Carbon Cycle * Carbon Sequestration * Climate change * Heat island effect * Sea level rise * Solutions/Engineering Design | | Fall  Break | Ecosystems:Interactions (6 weeks)   * Habitat Assessments * Biodiversity * Carrying Capactiy * Aerobic & Anaerobic Conditions * Photosynthesis & Respiration * Human Impacts * Solutions * Soil & Water Testing * GIS | | Earth’s Systems  (4 weeks)   * Hydrosphere * Atmosphere * Biosphere * Geosphere * Biogeochemical Cycles * Pollution: air, water, land * Solutions | | Christmas Break |

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| January  (4 weeks) | February  (4 weeks) | | March  (4 weeks) |  | April  (3 weeks) | | | May  (2 weeks) | |
| History of the Earth (4 weeks)   * Geologic Time: Major Events * Relative & Absolute Dating * Tectonic Processes * Evolution of Life | Natural Selections & Adaptations (4 weeks)   * Darwin & Natural Selection * Phylogeny & Fossil Record * How adaptations occur * Embryology | | Growth, Devlopment & Reproduction (4 weeks)   * Sexual v/s Asexual Reproduction * Meiosis & Mitosis * Genetic Mutations, Karyotyping * Heredity, Punnet Squares   Genetic Engineering | Spring Break | Structure, Function & Info Processing (2 weeks)   * Nervous system * neurotransmissions | | Energy (2-3 weeks)   * Potential v/s Kinetic Energy | | |
| Human Sustainability (7 weeks)   * Carrying Capacity * Population & Consumption * Natural Resources * Natural Hazards * Human Impacts | | Outdoor Greenscaping (4 weeks)   * Native & Invasive Species * Rain Garden Implementation * Erosion Control * GIS * Data Collection | | Spring Break | | Environmental Leadership (4 weeks)   * Earth Day History * Community Service Projects | | |