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|  | August (3 wks) | September (4 weeks) |  | October(3 weeks) | November(3 ½ weeks) | December(3 weeks) |  |
| 8th GradeGeneralScience | 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
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| 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
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