

GRADE TOPICS

S.6-8.ES.1

Level 6- Ch. 7.2, Ch. 8:
8.2, 8.3, Ch. 9.1, 9.2, 9.
Level 8 - Ch. 8.1, 8.2, 8
Ch. 10.1

Level 6- Creating Sedimentary Rock SE 231/SJ 7;

S.6-8.ES.3

Level 6 Ch. 8.1, 8.2, 8.
Ch. 10.1, 10.2
Level 8 Ch. 10.1, 10.2

6-8

Earth and Human Activity

<p>S.6-8.ESS.7</p> <p>Construct a scientific explanation based on evidence for how the unequal distributions of Earth's mineral, energy, and groundwater resources are a result of past and current geoscience processes (e.g., plate tectonics, the rock cycle). (MS-ESS3-1)</p>	<p>Level 6 Ch. 7.3, Ch. 8.2, 8.3, Ch. 9.3</p> <p>Level 8 Ch. 9.3, Ch. 10.2, 10.3</p>	<p>Level 6- ATBD; Mining Desert TE 253/SJ 22; Core Sampling SE 264/SJ 36; Coring the Earth TE 264/SJ 265; Model Sea Floor Spreading SE 272/SJ 40; Plate Boundary Types TE 275/SJ 44, EAL 284</p> <p>Level 8- EAL 370; ATBD</p>
<p>S.6-8.ESS.8</p> <p>Analyze and interpret data (e.g., locations, magnitudes, frequencies) to forecast future catastrophic events and inform the development of technologies to mitigate their effects. (MS-ESS3-2)</p>	<p>Level 6 Ch. 8.3</p> <p>Level 7 - Ch. 8.2, 8.3</p> <p>Level 8 Ch. 10.1</p>	<p>Level 6- Finding the Epicenter SE 280/SJ 48; Recurring Epicenters TE 280/SJ 50, EAL 284</p> <p>Level 7- ATBD</p> <p>Level 8- ATBD</p>
<p>S.6-8.ESS.9</p> <p>Apply scientific principles to design a method for monitoring and minimizing human impact (e.g., water usage, soil usage, pollution) on the environment. (MS-ESS3-3)</p>	<p>Level 8 Ch. 9.1, 9.2, 9.4</p>	<p>Level 8- Resource Tally SE 323/SJ 43, EAL 327; Earth Biofuels SE 328/SJ 44; Alternative Biofuels TE 323/SJ 44, EAL 334; Fertilizer Contest TE 336/SJ 48; Preventing Erosion SE 338/SJ 51; Testing Erosion Control TE 342/SJ 54, EAL 348, EAL 352; It's Raining SE 351/SJ 56; Clouds and Temperature SE 273/SJ 7, EAL 280, EAL 291. Wind and Evaporation SE 295/SJ 16; It Feels Like a Sauna SE 357/SJ 60</p>
<p>S.6-8.ESS.10</p> <p>Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems. (MS-ESS3-4)</p>	<p>Level 6 Ch. 7.3</p> <p>Level 8 Ch. 8.5, Ch. 9.2, 9.3, 9.4</p>	<p>Level 6- MS 252; Mining Desert TE 253/SJ 22, LA 253/SJ 22</p> <p>Level 8- Resource Tally SE 323/SJ 43; It's Raining SE 351/SJ 56; It Feels Like a Sauna SE 357/SJ 60, EAL 355</p>
<p>S.6-8.ESS.11</p> <p>Ask questions to clarify evidence (e.g., tables, graphs, maps of global temperatures, atmospheric levels of gases, rates of human activities) that have caused the rise in global temperatures over the past century (e.g., fossil fuel combustion, cement production, agricultural activity, change in infrared radiation, volcanic activity). (MS-ESS3-5)</p>	<p>Level 6 - Ch.8.3</p> <p>Level 8 Ch. 9.1, 9.2, 9.4</p>	<p>Level 6- EAL 284</p> <p>Level 8- EAL 356; It Feels Like a Sauna SE 357/SJ 60; Shade TE 357/SJ 64; ATBD</p>

S.6-8.ES.12

Level 7- Ch.9.1, 9.2, 9.3
Level 8 - Ch. 8.5

Level 7-- Make Your Own Solar Eclipse SE 327/SJ 29; Make a Sun Clock SE 330/SJ 30; Movement of Shadows SE 330/SJ 32; Solar Energy SE 336/SJ 34. EAL 338, EAL 339/SJ 40; Extreme Tides TE 345/SJ 42
Level 8-- EAL 311

S.6-8.ES.13

Level 7- Ch. 8.1, 8.2, Ch. 9.1, 9.2, 9.3, Ch. 10.2

Level 7-- Planetary Orbits TE 295/SJ 8; Solar System Distances SE 296/SJ 10; Moon Orbit TE 296/SJ 12

S.6-8.ES.14

Level 7- Ch. 8.1, 8.2, Ch. 9.3

Level 7-- How Much Do You Weigh SE 291/SJ 7; Planetary Orbits TE 295/SJ 8; Solar System Distances SE 296/SJ 10; Moon Orbit TE 296/SJ 12; Making Dents SE 208/SJ 10

S.6-8.ES.15

Level 6- Ch. 10.1, 10.2, 10.3
Level 8- Ch. 1.1, 1.2, Ch. 10.2, 10.3

Level 6-- Putting It Together SE 323/SJ 86; Geological Experience TE 323/SJ 88; Stories in Stone TE 329/SJ 87, EAL 330, EAL 331; Who Goes There SE 334/SJ 98; Footprint Depth TE 334/SJ 98, ID the Trilobites SE 343/SJ 100; Recent Extinctions TE 343/SJ 104, EAL 345
Level 8-- EAL 21, EAL 37, EAL 42, EAL 373; And the





S.6-8.HS.5

Level 6 Ch. 6.2, 6.3
Level 7 Ch. 5.2, 5.3, Cl
6.3
Level 8 Ch. 5.3, Ch. 6.
6.2, 6.3

Healthy Lifestyle Choices	S.6-8.HS.8	Construct an argument that supports the claim that modifying unhealthy behaviors can enhance personal health.	Level 6 Ch. 4.4, 4.5, Ch. 5.3, 5.4, Ch. 6.2 Level 7 Ch. 5.3, Ch. 6.1, 6.4 Level 8 Ch. 5.3, Ch. 6.2, 6.3, 6.4, Ch. 7.1	Level 6- ATBD Level 7- ATBD Level 8- ATBD
	S.6-8.HS.9	Plan and conduct an investigation that provides evidence that peers' perceptions of norms influence the health of adolescents.	Level 6 Ch. 6.2 Level 7 Ch. 5.3, Ch. 6.1, 6.4 Level 8 Ch. 6.2, 6.3, 6.4, Ch. 7.1, 7.2	Level 6- ATBD Level 7- LA 205; ATBD; Hey, Wanna Trade SE 241; ATBD Level 8- Evaluate and Rank Behaviors SE 231/SJ 233, LA 249, LA 262, LA 263
	S.6-8.HS.10	Construct a model that demonstrates how public health policies can promote health promotion and disease prevention.	Level 6 Ch. 6.2, 6.3 Level 7 Ch. 6.2, 6.3 Level 8 Ch. 6.1, 6.2, 6.3, Ch. 7.2, 7.3	Level 6- ATBD Level 7- LA 240, LA 235, ATBD Level 8- ATBD
	S.6-8.HS.11	Analyze and interpret data that provides evidence to support the claim that traditional Adventist health practices promote optimal health.	Level 6 Ch. 5.3, 5.4 Level 7 Ch. 5.2, 5.3, 6.2, 6.4, Ch. 7.1 Level 8 Ch. 5.2, 5.3, Ch. 6.2, 6.3	Level 6- ATBD Level 7- ATBD Level 8- ATBD



6-8

Ecosystems: Interactions, Energy and Dynamics	S.6-8.LS.9	Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. (MS-LS2-1)	Level 8- Ch. 4.1, 4.3, 4.4	Level 8- ATBD
	S.6-8.LS.10	Construct an explanation that predicts patterns of interactions (e.g., competitive, predatory, mutually beneficial) among organisms across multiple ecosystems. (MS-LS2-2)	Level 8 Ch. 4.1, 4.3, 4.4, 4.5	Level 8- ATBD
	S.6-8.LS.11	Develop a model to describe the cycling of matter and flow of energy and nonliving parts of an ecosystem. (MS-LS2-3)	Level 6 Ch. 1.1, 1.2, 1.3 Level 8 Ch. 3.1, Ch. 4.3	Level 6- ATBD Level 8- ATBD
	S.6-8.LS.12	Construct an argument supported by empirical evidence that changes in the behavior of biological components of an ecosystem affect populations. (MS-LS2-4)	Level 8 Ch. 4.1, 4.3, 4.4	Level 8- ATBD
	S.6-8.LS.13	Evaluate competing design solutions (e.g., scientific, economic, social, or technical considerations) for maintaining biodiversity and ecosystem services (e.g., water purification, nutrient recycling, soil erosion prevention, habitat, enhanced carbon sequestration). (MS-LS2-5)	Level 8 Ch. 3.3, Ch. 4.1 Ch. 9.1, 9.2, 9.3, 9.4	Level 8- ATBD
Heredity: Inheritance and Variation of Traits	S.6-8.LS.14	Develop and use a model to describe why structural changes to genes located on chromosomes may affect proteins and may result in harmful or neutral effects to the structure and function of the organism. (MS-LS3-1)	Level 6 Ch. 3.1, 3.2 Level 7 Ch. 4.1	Level 6- ATBD Level 7- ATBD
	S.6-8.LS.15	Develop and use a model (e.g., Punnett squares, diagrams, simulations) to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. (MS-LS3-2)	Level 6 Ch. 3.1 Level 7 Ch. 4.1, 4.2, 4.3 Level 8 Ch. 2.2, 2.3, 2.4	Level 6- ATBD Level 7- ATBD Level 8- ATBD

Life: Origins, Unity, and Diversity	S.6-8.LS.16	Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth, comparing and contrasting creationist and naturalist perspectives. (MS-LS4-1)	Level 6- Ch. 10., 10.2, 10.3 Level 8- Ch. 1.2, 1.3, Ch. 10.3	Level 6-- ATBD Level 8-- ATBD
	S.6-8.LS.17	Apply scientific principles to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and extinct organisms, comparing and contrasting creationist and naturalist perspectives. (MS-LS4-2)	Level 6- Ch. 10.1, 10.2, 10.3 Level 8- Ch. 1.3, Ch. 10.3	Level 6-- ATBD Level 8-- ATBD
	S.6-8.LS.18	Construct an explanation based on evidence that describes how genetic variation in a population increase some individuals' probability of surviving and reproducing in a specific environment. (MS-LS4-4)	Level 6- Ch. 1.1 Level 7- Ch. 4.2, 4.3 Level 8- Ch. 1.1, Ch. 3.1, Ch. 4.2, 4.4	Level 6-- ATBD Level 7-- ATBD Level 8-- ATBD
	S.6-8.LS.19	Gather and synthesize information about the technologies that have been developed to increase the efficiency of selective breeding of organisms. (MS-LS4-5)	Level 7- Ch. 4.4	Level 7-- ATBD
	S.6-8.LS.20	Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time. (MS-LS4-6)	Level 7- Ch. 4.1, 4.2 Level 8- Ch. 1.1, Ch. 4.1, 4.3, 4.4	Level 7-- ATBD Level 8-- ATBD
	S.6-8.LS.21	Apply scientific principles to begin to construct and share a personal model that explains origins of life on earth and acknowledges God as the Creator. (MS-LS4-7)	Level 6- Ch. 1.1, 1.2, 1.3, 10.2, 10.3 Level 7- Ch. 1.1, Ch. 4.1 Level 8- Ch. 1.1, 1.2, Ch. 10.2, 10.3	Level 6-- ATBD Level 7-- ATBD Level 8-- ATBD

S.6-8.PS.1		<p>Level 6- Atomic Models SE 402/SJ 38; Molecular I SE 420/SJ 50; Chemical Formula of a Molecule TE 54, EAL 422</p> <p>Level 6- Ch. 12.1, 12.3</p> <p>Level 8- Ch. 13.1, 13.2, 13.3</p>	<p>Level 8- Let's Join Up SE 477/SJ 65; Investigate I Bonds SE 481/SJ 66; Model of Calcium Chloride TI 68, EAL 482; Build Models of Molecules SE 488/SJ Large Molecules TE 488/SJ 72; Build and Name I Compounds SE 495/SJ 78; Build Diatomic Models 80, EAL 499</p>
S.6-8.PS.2		<p>Level 6- Ch. 11.3, 11.4, Ch. 12.2</p> <p>Level 8- Ch. 11.3 Ch. 14.1, 14.2</p>	<p>Level 6- Reactions in a Bag SE 381/SJ 16, EAL 38 386; Pondering Plaster SE 388/SJ 20, EAL 389, E Degrees of Change TE 391/SJ 24, EAL 393; Coppe Nail</p> <p>Level 8- Cabbage Chemistry SE 423/ SJ 18; Let's Join Up S 65; How Do You Know SE 505/SJ 91, EAL 507; M Changes SE 509/SJ 92; Testing Powders TE 509/S Investigating Chemical Reactions SE 510/SJ 96, E, EAL 513; Where Did It Go SE 519/SJ 100, EAL 52</p>
S.6-8.PS.3	<p>Gather and make sense of information to describe that synthetic mat from natural resources and impact society (e.g., new medicines, food fuels). (MS-PS1-3)</p>	<p>Level 6- Ch. 7.3</p> <p>Level 8- Ch. 9.1</p>	<p>Level 6- Nail File or Emory Board SE 249/SJ 18; B Rocks TE 249/SJ 20; ATBD</p> <p>Level 8- Resource Tally SE 323/SJ 43; Evaluating SE 328/SJ 44 Alternative Biofuels TE 328/SJ 46; F Contest TE 336/SJ 48</p>
S.6-8.PS.4	<p>Develop a model (e.g., drawings, diagrams) that predicts and describes particle (e.g., molecules, inert atoms) motion, temperature, and state</p>	<p>Level 6- Ch. 11.2</p> <p>Level 7- Ch. 14.1, 14.3</p> <p>Level 8- Ch. 11.1, Ch. 15</p>	<p>Level 6- Dissolvign Sugar SE 372/SJ 12, EAL 374</p> <p>Level 7- Heat Experiment SE 513/SJ 93; Heat and Temperature SE 540/SJ 107; Comparing Conductiv 1540/SJ 108, EAL 543, EAL 546, EAL 548, EAL 555</p> <p>Level 8- EAL 410, EAL 527</p>

S.6-8.PS.5

Level 6 Ch. 11.3
Level 8 Ch. 14.2, 14.3,
14.4

S.6-8.PS.12

Level 7- Ch. 12.2, Ch.
14.1, 14.2

Level 7-- Accelerated Motion SE 449/SJ 42; Compa
Accelerated Motion TE 449/SJ 46; Collisions TE 45
EAL 516; Swinging Pendulum TE 518/SJ 94, EAL 5
Investigating Potential Energy SE 520/SJ 98, EAL 5

S.6-8.PS.13

Level 6 Ch. 13.1, Ch. 1
Level 7 Ch. 12.3, Ch.
14.1, 14.2

Level 6- Electrostatic Discharge SE 437/SJ 73; Tal
Charge SE 440/SJ 174; Distance and Strength TE