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**ALIGNMENT**  
**FLORIDA DEPARTMENT OF EDUCATION**  
**INSTRUCTIONAL MATERIALS - WRITTEN CORRELATION**  
**COURSE STANDARDS / BENCHMARKS**

BENCHMARK CODE	BENCHMARK	LESSONS WHERE STANDARD/BENCHMARK IS DIRECTLY ADDRESSED IN MAJOR TOOL (MOST IN-DEPTH COVERAGE LISTED FIRST) (Include the student edition and teacher edition with the page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
<a href="#">SC.912.L.14.11:</a>	Classify and state the defining characteristics of epithelial tissue, connective tissue, muscle tissue, and nervous tissue.	64-73, 73 (#1-9), 78 (#35-51), 82-84, 84 (#1-8), 156-158, 191 (#1-5), 198-199
<a href="#">SC.912.L.14.12:</a>	Describe the anatomy and histology of bone tissue.	111-115, 119 (#2, 3), 151 (#1-8)
<a href="#">SC.912.L.14.13:</a>	Distinguish between bones of the axial skeleton and the appendicular skeleton.	120-128, 129 (#1-6), 130-137, 137 (#1-4), 151 (#9-11), 152 (#12-24)
<a href="#">SC.912.L.14.14:</a>	Identify the major bones of the axial and appendicular skeleton.	120-128, 129 (#1-6), 130-137, 137 (#1-4), 151 (#9-11), 152 (#12-24)
<a href="#">SC.912.L.14.15:</a>	Identify major markings (such as foramina, fossae, tubercles, etc.) on a skeleton. Explain why these markings are important.	131-132
<a href="#">SC.912.L.14.16:</a>	Describe the anatomy and histology, including ultrastructure, of muscle tissue.	156-158, 159 (Figure 5.3), 161 (#1, 8, 10), 166-167, 170 (#4), 191 (#2, 3)
<a href="#">SC.912.L.14.17:</a>	List the steps involved in the sliding filament of muscle contraction.	163-164
<a href="#">SC.912.L.14.18:</a>	Describe signal transmission across a myoneural junction.	163, 164 (Figure 5.6)
<a href="#">SC.912.L.14.19:</a>	Explain the physiology of skeletal muscle.	156-157, 159-160, 161 (#3, 4), 162-170, 191 (#11-12), 192 (#13-18)
<a href="#">SC.912.L.14.20:</a>	Identify the major muscles of the human on a model or diagram.	174-181, 192 (#19-26)
<a href="#">SC.912.L.14.21:</a>	Describe the anatomy, histology, and physiology of the central and peripheral nervous systems and name the major divisions of the nervous system.	196-201, 201 (#1-9), 207-214, 215 (#1-9), 216-221, 222 (#1-12), 233 (#1-8), 234 (#17-34)
<a href="#">SC.912.L.14.22:</a>	Describe the physiology of nerve conduction, including the generator potential, action potential, and the synapse.	202-204, 206 (#1-5, 7-8), 233 (#9-11), 234 (#12-16)
<a href="#">SC.912.L.14.23:</a>	Identify the parts of a reflex arc.	204 (Figure 6.7), 205-206
<a href="#">SC.912.L.14.25:</a>	Identify the major parts of a cross section through the spinal cord.	214 (Figure 6.15)
<a href="#">SC.912.L.14.27:</a>	Identify the functions of the major parts of the brain, including the meninges, medulla, pons, midbrain, hypothalamus, thalamus, cerebellum and cerebrum.	207-209, 211-212, 215 (#1-5, 7-9), 234 (#17-25), 235 (#50)
<a href="#">SC.912.L.14.28:</a>	Identify the major functions of the spinal cord.	214, 215 (#6)
<a href="#">SC.912.L.14.29:</a>	Define the terms endocrine and exocrine.	269
<a href="#">SC.912.L.14.30:</a>	Compare endocrine and neural controls of physiology.	270-272, 274 (#6), 297 (#9)
<a href="#">SC.912.L.14.31:</a>	Describe the physiology of hormones including the different types and the mechanisms of their action.	269-274, 297 (#3-6)
<a href="#">SC.912.L.14.34:</a>	Describe the composition and physiology of blood, including that of the plasma and the formed elements.	334-346, 346 (#1-7), 363 (#1-6), 364 (#7-11)

<a href="#">SC.912.L.14.35:</a>	Describe the steps in hemostasis, including the mechanism of coagulation. Include the basis for blood typing and transfusion reactions.	343, 345-346, 346 (#7), 347-348, 351 (#1-4, 7-8, 11-12), 364 (#11, 12-22)
<a href="#">SC.912.L.14.36:</a>	Describe the factors affecting blood flow through the cardiovascular system.	372-374
<a href="#">SC.912.L.14.37:</a>	Explain the components of an electrocardiogram.	377, 378 (Figure 11.8)
<a href="#">SC.912.L.14.38:</a>	Describe normal heart sounds and what they mean.	373, 407 (#5)
<a href="#">SC.912.L.14.39:</a>	Describe hypertension and some of the factors that produce it.	402
<a href="#">SC.912.L.14.40:</a>	Describe the histology of the major arteries and veins of systemic, pulmonary, hepatic portal, and coronary circulation.	382-391, 396 (#1-5), 408 (#18-27)
<a href="#">SC.912.L.14.41:</a>	Describe fetal circulation and changes that occur to the circulatory system at birth.	392
<a href="#">SC.912.L.14.42:</a>	Describe the anatomy and the physiology of the lymph system.	412-419, 420 (#1-9), 447 (#1-8)
<a href="#">SC.912.L.14.43:</a>	Describe the histology of the respiratory system.	303-309, 309 (#3-7), 329 (#2-14)
<a href="#">SC.912.L.14.44:</a>	Describe the physiology of the respiratory system including the mechanisms of ventilation, gas exchange, gas transport and the mechanisms that control the rate of ventilation.	310-312, 313-315, 317 (#1, 3-7)
<a href="#">SC.912.L.14.45:</a>	Describe the histology of the alimentary canal and its associated accessory organs.	460 (Figure 13.7), 462-478, 478 (#4-9), 488 (#16, 19-25, 28)
<a href="#">SC.912.L.14.46:</a>	Describe the physiology of the digestive system, including mechanical digestion, chemical digestion, absorption and the neural and hormonal mechanisms of control.	283, 459-462, 464-478, 478 (#1-14), 488 (#17, 18, 20-28)
<a href="#">SC.912.L.14.47:</a>	Describe the physiology of urine formation by the kidney.	499-506, 510 (#1-5), 524 (#11-24)
<a href="#">SC.912.L.14.48:</a>	Describe the anatomy, histology, and physiology of the ureters, the urinary bladder and the urethra.	506-508, 510 (#8), 524 (#22, 23)
<a href="#">SC.912.L.14.49:</a>	Identify the major functions associated with the sympathetic and parasympathetic nervous systems.	219-221, 222 (#7)
<a href="#">SC.912.L.14.50:</a>	Describe the structure of vertebrate sensory organs. Relate structure to function in vertebrate sensory systems.	238-242, 247 (#1-7), 247-250, 253 (#1-10), 254-255, 257-258, 259 (#1-2, 4-5), 263 (#1-5, 8-9), 264 (#12-18, 20-27, 29-31, 37)
<a href="#">SC.912.L.14.51:</a>	Describe the function of the vertebrate integumentary system.	85-86, 91 (#4, 10), 106 (#32)
<a href="#">SC.912.L.14.52:</a>	Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines, and antibiotics.	421-428, 428 (#1-8), 429-436, 437 (#1-10), 448 (#9-26)
<a href="#">SC.912.L.16.8:</a>	Explain the relationship between mutation, cell cycle, and uncontrolled cell growth potentially resulting in cancer.	62-63, 78 (#51), 97 (What Research Tells Us), 324-325, 438-439, 443 (#9), 448 (#27)
<a href="#">SC.912.L.16.10:</a>	Evaluate the impact of biotechnology on the individual, society and the environment, including medical and ethical issues.	341 (What Research Tells Us), 355 (What Research Tells Us), 359 (13-14), 441 (What Research Tells Us), 557 (What Research Tells Us), 563 (What Research Tells Us)
<a href="#">SC.912.L.16.13:</a>	Describe the basic anatomy and physiology of the human reproductive system. Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy.	535-539, 539 (#1-10), 540-549, 549 (#1-11), 550-555, 558 (#1-8, 11)
<a href="#">SC.912.L.18.2:</a>	Describe the important structural characteristics of monosaccharides, disaccharides, and polysaccharides and explain the functions of carbohydrates in living things.	38-39, 50 (#2), 77 (#2), 454
<a href="#">SC.912.L.18.3:</a>	Describe the structures of fatty acids, triglycerides, phospholipids, and steroids. Explain the functions of lipids in living organisms. Identify some reactions that fatty acids undergo. Relate the structure and function of cell membranes.	42-45, 50 (#6-7), 51-53, 63 (#7), 77 (#5, 7), 278 (Memory Tip), 283, 455-456, 472, 473, 487 (#10, 11, 15)
<a href="#">SC.912.L.18.4:</a>	Describe the structures of proteins and amino acids. Explain the functions of proteins in living organisms. Identify some reactions that amino acids undergo. Relate the structure and function of enzymes.	41-42, 45, 46, 47, 50 (#3-5), 56, 57, 58, 61, 77 (#6, 9, 10, 11), 239, 278 (Memory Tip), 283, 345, 423, 454-455, 461, 467, 467 (Memory Tip), 470, 472, 473, 476, 478 (#11), 487 (#9), 505, 551, 570 (#27)
<a href="#">SC.912.L.18.6:</a>	Discuss the role of anaerobic respiration in living things and in human society.	374

<a href="#">SC.912.L.18.8:</a>	Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration.	15, 301-331, 373, 374
<a href="#">SC.912.L.18.11:</a>	Explain the role of enzymes as catalysts that lower the activation energy of biochemical reactions. Identify factors, such as pH and temperature, and their effect on enzyme activity.	40 (What Research Tells Us), 41-42, 47, 50 (#5), 56, 456, 467, 470, 476, 551
<a href="#">SC.912.N.1.1:</a>	<p>Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following: 1. Pose questions about the natural world, (Articulate the purpose of the investigation and identify the relevant scientific concepts).</p> <p>2. Conduct systematic observations, (Write procedures that are clear and replicable. Identify observables and examine relationships between test (independent) variable and outcome (dependent) variable. Employ appropriate methods for accurate and consistent observations; conduct and record measurements at appropriate levels of precision. Follow safety guidelines).</p> <p>3. Examine books and other sources of information to see what is already known,</p> <p>4. Review what is known in light of empirical evidence, (Examine whether available empirical evidence can be interpreted in terms of existing knowledge and models, and if not, modify or develop new models).</p> <p>5. Plan investigations, (Design and evaluate a scientific investigation).</p> <p>6. Use tools to gather, analyze, and interpret data (this includes the use of measurement in metric and other systems, and also the generation and interpretation of graphical representations of data, including data tables and graphs), (Collect data or evidence in an organized way. Properly use instruments, equipment, and materials (e.g., scales, probeware, meter sticks, microscopes, computers) including setup, calibration, technique, maintenance, and storage).</p> <p>7. Pose answers, explanations, or descriptions of events,</p> <p>8. Generate explanations that explicate or describe natural phenomena (inferences),</p> <p>9. Use appropriate evidence and reasoning to justify these explanations to others,</p> <p>10. Communicate results of scientific investigations, and</p> <p>11. Evaluate the merits of the explanations produced by others.</p>	22-29, 25 (Taking it Further #1), 34 (36-38), 107 (#51), 170 (#9), 193 (#45), 259 (#10), 264 (#38), 381 (#9), 510 (#12), 525 (#49), 558 (#13)
<a href="#">SC.912.N.1.2:</a>	Describe and explain what characterizes science and its methods.	22-29, 29 (#5, 6)
<a href="#">LAFS.1112.RST.1.1:</a>	Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.	73 (#10), 107 (#49, 50), 449 (#42)
<a href="#">LAFS.1112.RST.1.2:</a>	Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	107 (#50), 265 (#45)
<a href="#">LAFS.1112.RST.1.3:</a>	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	107 (#51), 381 (#9), 525 (#49)
<a href="#">LAFS.1112.RST.2.4:</a>	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.	265 (#43)
<a href="#">LAFS.1112.RST.2.5:</a>	Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	84 (#1, 2), 93-94, 112-113, 138-140, 156-158, 337 (#1)

<a href="#">LAFS.1112.RST.2.6:</a>	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.	443 (#1)
<a href="#">LAFS.1112.RST.3.7:</a>	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.	22-26, 34 (#38), 107 (#50), 187 (#12), 299 (#42), 324 (Taking it Further #1), 359 (#14), 409 (#44), 443 (#12), 449 (#39)
<a href="#">LAFS.1112.RST.3.8:</a>	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.	34 (#38), 253 (#12), 381 (#9), 489 (#51)
<a href="#">LAFS.1112.RST.3.9:</a>	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	34 (#38), 253 (#12), 381 (#9), 489 (#51)
<a href="#">LAFS.1112.RST.4.10:</a>	By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.	107 (#49), 299 (#41), 331 (#50), 365 (#38)
<a href="#">LAFS.1112.SL.1.1:</a>	<p>initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher--led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.</p> <p>a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.</p> <p>b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.</p> <p>c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.</p> <p>d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.</p>	35 (#43), 79 (#55), 153 (#41), 193 (#43), 235 (#47), 489 (#49 and #50)
<a href="#">LAFS.1112.SL.1.2:</a>	Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.	34 (#38), 253 (#12), 381 (#9), 489 (#51)
<a href="#">LAFS.1112.SL.1.3:</a>	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.	153 (#41), 265 (#44), 299 (#43), 449 (#40), 489 (#49)
<a href="#">LAFS.1112.SL.2.4:</a>	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.	78 (#34), 101 (#10), 107 (#49), 147 (#9), 193 (#44), 235 (#47), 299 (#42), 489 (#49), 557 (Taking it Further, #1),
<a href="#">LAFS.1112.SL.2.5:</a>	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	265 (#45, 46), 274 (#9), 325 (#13), 359 (#14), 565 (#15)

Write arguments focused on discipline-specific content.

a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.

c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

e. Provide a concluding statement or section that follows from or supports the argument presented.

107 (#49, 50), 153 (#42), 265 (#43)

Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.

c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or

331 (#50), 365 (#38, 39)

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

107 (#49, 50), 153 (#42), 265 (#43), 331 (#50), 365 (#38, 39), 437 (#10)

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

107 (#49, 50), 153 (#42), 265 (#43), 331 (#50), 365 (#38, 39), 437 (#10)

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

274 (#9)

[LAFS.1112.WHST.1.1:](#)

[LAFS.1112.WHST.1.2:](#)

[LAFS.1112.WHST.2.4:](#)

[LAFS.1112.WHST.2.5:](#)

[LAFS.1112.WHST.2.6:](#)

<a href="#">LAFS.1112.WHST.3.7:</a>	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	25 (Taking it Further), 26 (Check Your Understanding)
<a href="#">LAFS.1112.WHST.3.8:</a>	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.	34 (#38), 253 (#12), 381 (#9), 489 (#51)
<a href="#">LAFS.1112.WHST.3.9:</a>	Draw evidence from informational texts to support analysis, reflection, and research.	73 (#10), 107 (#49, 50), 449 (#42)
<a href="#">LAFS.1112.WHST.4.10:</a>	Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	35 (#42), 107 (#49), 107 (#50), 153 (#42), 235 (#49), 259 (#10), 265 (#43), 331 (#50), 437 (#9)
<a href="#">LAFS.1112.WHST.1.1d:</a>	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	107 (#49, 50), 153 (#42), 265 (#43), 331 (#50), 365 (#38, 39), 437 (#10)
<a href="#">MAFS.912.F-IF.2.4:</a>	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. ★	35 (Analyzing and Evaluating Data), 193 (Analyzing and Evaluating Data), 231 (Figure 6.26), 235 (Analyzing and Evaluating Data), 265 (#45), 299 (Analyzing and Evaluating Data), 317 (#9), 409 (Analyzing and Evaluating Data), 449 (Analyzing and Evaluating Data), 489 (Analyzing and Evaluating Data)
<a href="#">MAFS.912.F-IF.3.7:</a>	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. ★ a. Graph linear and quadratic functions and show intercepts, maxima, and minima; b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions; c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior; d. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior; e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude, and using phase shift	35 (Analyzing and Evaluating Data), 193 (Analyzing and Evaluating Data), 231 (Figure 6.26), 235 (Analyzing and Evaluating Data), 265 (#45), 299 (Analyzing and Evaluating Data), 317 (#9), 409 (Analyzing and Evaluating Data), 449 (Analyzing and Evaluating Data), 489 (Analyzing and Evaluating Data)
<a href="#">MAFS.912.N-Q.1.1:</a>	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. ★	8 (#11), 34 (#36), 317 (#9), 519 (#12), 525 (Analyzing and Evaluating Data)
<a href="#">MAFS.912.N-Q.1.3:</a>	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. ★	317 (#9), 519 (#12)
<a href="#">MAFS.912.S-IC.2.6:</a>	Evaluate reports based on data. ★	35 (#39-42), 79 (#52-54), 107 (#46-48), 193 (#38-42), 235 (#43-46), 265 (#40-42), 299 (#39-41), 331 (#45-48), 365 (#33-37), 409 (#28-31), 449 (#25-28), 489 (#15-18), 525 (#12-16), 571 (#16-19)
<a href="#">MAFS.912.S-ID.1.1:</a>	Represent data with plots on the real number line (dot plots, histograms, and box plots). ★	265 (#45), 317 (#9)
<a href="#">MAFS.912.S-ID.1.2:</a>	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. ★	
<a href="#">MAFS.912.S-ID.1.3:</a>	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). ★	

<a href="#">MAFS.912.S-ID.1.4:</a>	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. ★	79 (Analyzing and Evaluating Data), 101 (#11), 107 (Analyzing and Evaluating Data), 193 (Analyzing and Evaluating Data), 265 (Analyzing and Evaluating Data), 365 (Analyzing and Evaluating Data), 449 (Analyzing and Evaluating Data), 525 (Analyzing and Evaluating Data)
<a href="#">MAFS.912.S-ID.2.5:</a>	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. ★	24, 34 (#38), 107 (#51), 265 (#45)
<a href="#">MAFS.912.S-ID.2.6:</a>	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. ★ a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, and exponential models. b. Informally assess the fit of a function by plotting and analyzing residuals. c. Fit a linear function for a scatter plot that suggests a linear association.	
<a href="#">HE.912.C.1.3:</a>	Evaluate how environment and personal health are interrelated.	13 (#4), 15 (What Research Tells Us), 85-86, 301, 387 (What Research Tells Us), 439-440
<a href="#">HE.912.C.1.5:</a>	Analyze strategies for prevention, detection, and treatment of communicable and chronic diseases.	97 (Taking it Further), 98-99, 145 (What Research Tells Us), 147 (#9), 153 (#41), 186, 210 (Taking it Further), 224, 225 (What Research Tells Us), 227-229, 265 (#43, 46), 287, 288, 289, 291, 293 (#5), 298 (#38), 319 (Figure 9.11), 321-324, 325 (#4, 13),
<a href="#">HE.912.C.1.7:</a>	Analyze how heredity and family history can impact personal health.	228-229, 291, 323, 325 (#11), 354, 365 (#39), 402, 403, 562, 563 (What Research Tells Us), 564
<a href="#">ELD.K12.ELL.SC.1:</a>	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.	The <i>Communicating about Anatomy and Physiology</i> activities on pages 35, 79, 107, 153, 193, 235, 265, 299, 331, 365, 409, 449, 489, 525, 571
<a href="#">ELD.K12.ELL.SI.1:</a>	English language learners communicate for social and instructional purposes within the school setting.	The <i>Communicating about Anatomy and Physiology</i> activities on pages 35, 79, 107, 153, 193, 235, 265, 299, 331, 365, 409, 449, 489, 525, 571