

INSTRUCTIONAL MATERIALS ADMINISTRATOR

BID 3317

Recommendation

No

Comments: The material covers the appropriate topics for the subject and has a very attractive presentation. The interactive components of the website are notable and would be an excellent supplement for both teaching and laboratory-based classrooms. Furthermore, the website is intuitive with an easy-to-use interface. It is evident that the authors' goal was to present this subject in a modern, "hip" way, and Science Bits accomplishes that goal. However, the material is complex and much too difficult for the average middle-school student to comprehend beyond the level of memorization. Most sections contain many technical definitions and processes, and some present too many complex topics within a single lesson. I understand that the subject is difficult and the authors are trying to incorporate all relevant information, but the material should be greatly simplified before presenting it to 6-8th graders. In addition, the final evaluations at the end of each lesson are not in good alignment with the material presented in the lesson. I appreciate that the evaluations require extensive critical thinking, which encourages learning over memorization. But, even as a professional "critical thinker", I found myself struggling to make the connection between the questions presented in the final evaluations and the material presented in the lessons. Because this is the main metric for student progress in this learning format, there needs to be a tighter link between the material and the exam.

Based on these two issues (complex presentation of topics and poor alignment of final evaluations with lessons), I cannot recommend the adoption of this website for the targeted grade levels of 6-8. However, with updates to the final evaluations, these lessons would be a perfect match for 11-12th grade or undergraduate non-major courses.

Material for Review

Course: M/J Life Science, Advanced (2000020)
Title: Science Bits - M/J Life Science, Advanced , Edition: 1st
Copyright: 2017
Author: International Science Teaching Foundation
Grade Level: 6 - 8

Content

Answer each item below and select the "Save" button to save your responses. You must select the "Save" button before going to another section or leaving this page to save the answers you have provided. If you are unable to complete the section, you may save your answers and come back to complete at a later time. All items must be answered for a section to be considered complete.

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- 5 - VERY GOOD ALIGNMENT
- 4 - GOOD ALIGNMENT
- 3 - FAIR ALIGNMENT
- 2 - POOR ALIGNMENT
- 1 - VERY POOR/NO ALIGNMENT

Upon completion of all Areas of Review, the Recommendation link will become available with a record of how you scored each section of the evaluation.

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Each set of materials submitted for adoption is evaluated based on each benchmark for that course and the Content, Presentation, and Learning items included in this rubric.

A. Alignment with curriculum1. A. The content aligns with the state's standards and benchmarks for subject, grade level and learning outcomes.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The content is comprehensive

2. A. The content is written to the correct skill level of the standards and benchmarks in the course.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

This is written at the level of many college Freshman lab manuals. I believe this would be difficult for a 6th-7th grader to comprehend. Perhaps an Advanced Placement 8th grader would have the skills to successfully complete these lessons, but overall, the content is more appropriate for upper-level high school or lower-level college groups.

3. A. The materials are adaptable and useful for classroom instruction.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

They are useful but would be even more so with supplemental instruction (e.g. hands-on experience with a microscope vs. viewing "slides" on a computer screen).

B. Level of Treatment4. B. The materials provide sufficient details for students to understand the significance of topics and events.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The use of everyday scenarios (i.e. in the videos) creates significance for a student with little knowledge of science. But, this could use more elaboration (e.g. Why is learning about cells and cellular structure important?).

5. B. The level (complexity or difficulty) of the treatment of content matches the standards.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The content is difficult for the targeted grade levels, but it matches the standards

6. B. The level (complexity or difficulty) of the treatment of content matches the student abilities and grade level.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Same as above

7. B. The level (complexity or difficulty) of the treatment of content matches the time period allowed for teaching.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The lessons could probably be completed in a 45 min-50 min class period with little teacher instruction. If the teacher prefers to be more interactive, it may be difficult to make it through a lesson in less than 1 hour.

C. Expertise for Content Development8. C. The primary and secondary sources cited in the materials reflect expert information for the subject.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

It is evident that the material reflects expert information.

9. C. The primary and secondary sources contribute to the quality of the content in the materials.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

D. Accuracy of Content10. D. The content is presented accurately. (Material should be devoid of typographical or visual errors).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The visual presentation is attractive

11. D. The content of the material is presented objectively. (Material should be free of bias and contradictions and is noninflammatory in nature).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

This is often an issue with Science Instruction, but the authors did an excellent job at addressing topics with logic and facts.

12. D. The content of the material is representative of the discipline? (Material should include prevailing theories, concepts, standards, and models used with the subject area).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Excellent array of topics

13. D. The content of the material is factual accurate. (Materials should be free of mistakes and inconsistencies).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

E. Currency of Content 14. E. The content is up-to-date according to current research and standards of practice.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

15. E. The content is presented to the curriculum, standards, and benchmarks in an appropriate and relevant context.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The content covers the appropriate curriculum, but is presented in a manner that is difficult for the targeted age group to comprehend

16. E. The content is presented in an appropriate and relevant context for the intended learners.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The videos would be useful in a 6-8th grade classroom, but I can see where there might be some difficulties getting students to stay on task with the text-heavy sections.

F. Authenticity of Content 17. F. The content includes connections to life in a context that is meaningful to students.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Yes, especially in the videos. Adding more of this will increase appeal to students

18. F. The material includes interdisciplinary connections which are intended to make the content meaningful to students.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

G. Multicultural Representation 19. G. The portrayal of gender, ethnicity, age, work situations, cultural, religious, physical, and various social groups are fair and unbiased. (Please explain any unfair or biased portrayals in the comments section).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

H. Humanity and Compassion 20. H. The materials portray people and animals with compassion, sympathy, and consideration of their needs and values and exclude hard-core pornography and inhumane treatment. (An exception may be necessary for units covering animal welfare).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

21. In general, is the content of the benchmarks and standards for this course covered in the material.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Presentation

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A. Comprehensiveness of Student and Teacher Resources1. A. The comprehensiveness of the student resources address the targeted learning outcomes without requiring the teacher to prepare additional teaching materials for the course.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The material presented to the student is similar to what they would encounter in a text book, and they could learn without additional teaching material. But, in practice, this is not an ideal method of learning. Students benefit most from interactive lessons where they are able to manipulate situations and observe the outcomes. These types of lessons improve their understanding of the material and their ability to form connections that allow them to retain it. I do NOT recommend using this website as the sole teaching material for this or other subjects.

B. Alignment of Instructional Components2. B. All components of the major tool align with the curriculum and each other.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

C. Organization of Instructional Materials3. C. The materials are consistent and logical organization of the content for the subject area.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

D. Readability of Instructional Materials4. D. Narrative and visuals engage students in reading or listening as well as in understanding of the content at a level appropriate to the students' abilities.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The narrated videos are a great resource , but the text-heavy portions of the lessons will not engage students in this technological age. The presentation is nice, but the more interactive lessons are going to yield better student response.

E. Pacing of Content5. E. The amount of content presented at one time or the pace at which it is presented must be of a size or rate that allows students to perceive and understand it.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

Some lessons were packed with difficult information. For example, lesson 3 covered cell organization/function, tissue organization/function, organs, organ systems, and touched on DNA. This lesson would not be able to be completed in a traditional class period, and if it were, the students would gloss over a lot of important details. These topics are extremely difficult for students to grasp because it is hard to visualize things at the cellular and genetic level, especially when you have little to no frame of reference like the targeted age group.

Accessibility6. The material contains presentation, navigation, study tool and assistive supports that aid students, including those with disabilities, to access and interact with the material. (For assistance refer to the answers on the UDL questionnaire).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The videos are closed captioned and narrated, but there are no options for seeing or reading impaired users.

7. In general, how well does the submission satisfy PRESENTATION requirements? (The comments should support your responses to the questions in the Presentation section).

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The website and lessons are attractive with a relatively easy to use interface.

Learning

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A. Motivational Strategies 1. A. Instructional materials include features to maintain learner motivation.

- VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The videos are excellent, especially the summary videos at the end of the lesson. I might adopt these videos for a freshman 'Intro to Bio' class! But, the text is long at times and syntax is difficult for the target grade levels (6-8).

B. Teaching a Few "Big Ideas" 2. B. Instructional materials thoroughly teach a few important ideas, concepts, or themes.

- VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Videos are excellent, but the text-based lessons should be guided by a teacher in order to maintain student engagement

C. Explicit Instruction 3. C. The materials contain clear statements of information and outcomes.

- VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The lessons were not in great alignment with the Final Evaluations at the end of each lesson. The concepts were similar, but answering the questions required higher-level critical thinking and extrapolation beyond the level of a 6th-8th grader. Many times the Final Evaluation required memorization of incredible detail (e.g. the function of specific vitamins in the diet and in what quantities they should be consumed), way beyond the capabilities of the targeted age group.

D. Guidance and Support 4. D. The materials provide guidance and support to help students safely and successfully become more independent learners and thinkers.

- VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The lessons have good topic coverage, but computer-based lessons with multiple-choice evaluations do not promote engagement (especially in younger students) and in turn, fail to produce critical thinking students. The lessons in the 'Engage' section, however, are very interactive and encourage independent thinking.

5. D. Guidance and support must be adaptable to developmental differences and various learning styles.

- VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The videos were closed captioned, but other than this, I saw no option to adapt these lessons for children with alternative learning styles (e.g. seeing impaired, dyslexic, etc.)

E. Active Participation of Students 6. E. The materials engage the physical and mental activity of students during the learning process.

- VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The 'Engage' section is excellent, particularly the open-ended questions.

7. E. Rate how well the materials include organized activities that are logical extensions of content, goals, and objectives.

- VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The Final Evaluation at the end of all lessons is not a logical extension of the goals of the lesson itself.

F. Targeted Instructional Strategies8. F. Instructional materials include the strategies known to be successful for teaching the learning outcomes targeted in the curriculum requirements.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

In general, students prefer hands-on activities rather than computer-based lessons. I recognize that these lessons are cost-effective and convenient and there is some evidence that students learn equally using these tools. If these lessons are used in conjunction with traditional teaching techniques and lab time, then they will promote student success. If they are used independently, then I do not agree that these materials include strategies for successful teaching and learning.

9. F. The instructional strategies incorporated in the materials are effective in teaching the targeted outcomes.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

See above justification

G. Targeted Assessment Strategies10. G. The materials correlate assessment strategies to the desired learning outcomes.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

No. The assessment strategies are way off. They do not correlate with the lessons and this will undeniably affect the desired learning outcome

11. G. the assessment strategies incorporated in the materials are effective in assessing the learners' performance with regard to the targeted outcomes.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The lessons provide the teacher with a score for each assignment for each student. There is no evaluation criteria past this. The Final Evaluations are often related to the lessons in an obscure way, and are not entirely representative of what the student learned.

Universal Design for Learning12. This submission incorporates strategies, materials, activities, etc., that consider the needs of all students.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

The videos were closed captioned, but other than this, I saw no option to adapt these lessons for children with alternative learning styles (e.g. seeing impaired, dyslexic, etc.)

Mathematical Practice13. Do you observe the appropriate application of Mathematical Practices (MP) as applicable?

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Several lessons incorporate unit conversion, etc.

14. In general, does the submission satisfy LEARNING requirements? (The comments should support your responses to the questions in the Learning section.)

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The content is excellent, but the way it is presented is much too advanced for a young middle school learner.

Standards

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When looking at standards alignment reviewers should consider not only the robustness of the standard coverage but also the content complexity (depth of knowledge level) if appropriate. More information on content complexity as it relates to Florida standards can be found at: http://www.cpalms.org/Uploads/docs/CPALMS/initiatives/contentcomplexity/CPALMS_ccdefinitions_140711.pdf

For example, if the standard is marked as a level 3 (strategic reasoning and complex thinking) then the materials coverage should reflect this. If the materials coverage is only sufficient to allow for recall (level 1) then this should be reflected in the points assigned.

1. **SC.6.L.14.1:** Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.7: Look for and make use of structure.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

2. **SC.6.L.14.2:** Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:
The only topic not covered was endosymbiosis

3. **SC.6.L.14.3:** Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

4. **SC.6.L.14.4:** Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.7: Look for and make use of structure.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

Could elaborate on how cell structure and function fits in to the bigger picture (e.g. you eat lunch, your body catabolizes the food and metabolizes it into units that cells can use, cells use these units to make ATP to power your cells, organs, organ systems, etc.). Even college students get lost in the details of cell function, again, because it is difficult for them to visualize a process that they cannot see.

5. **SC.6.L.14.5:** Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:
The information was excellent, but presented at a level that is too advanced for the targeted age group

6. **SC.6.L.14.6:** Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.

Remarks/Examples:

Integrate HE.6.C.1.8. Explain how body systems are impacted by hereditary factors and infectious agents.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:
This information was given, but it was sort of distracting given the complexity of the lesson.

7. **SC.6.L.15.1:** Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

8. **SC.6.N.1.1:** Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize

data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

Remarks/Examples:

Florida Standards Connections: LAFS.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

The process is in line with the Florida standards, but the presentation is much too difficult for a 6th grader to follow. These lessons would be excellent as-is for high school juniors & seniors, and college freshman non-majors. It should be simplified greatly for use at lower grade levels.

9. **SC.6.N.1.2:** Explain why scientific investigations should be replicable.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

10. **SC.6.N.1.3:** Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.

Remarks/Examples:

Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

11. **SC.6.N.1.4:** Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

12. **SC.6.N.1.5:** Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.

Remarks/Examples:

Florida Standards Connections: LAFS.68.RST.3.7 LAFS.68.WHST.1.2 and, LAFS.68.WHST.3.9.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

13. **SC.6.N.2.1:** Distinguish science from other activities involving thought.

Remarks/Examples:

Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

14. **SC.6.N.2.2:** Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

15. **SC.6.N.2.3:** Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

16. **SC.6.N.3.1:** Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

17. **SC.6.N.3.2:** Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

18. **SC.6.N.3.3:** Give several examples of scientific laws.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

19. **SC.6.N.3.4:** Identify the role of models in the context of the sixth grade science benchmarks.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

20. **SC.7.L.15.1:** Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

21. **SC.7.L.15.2:** Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

Good information, although presented in a way that will be difficult for young students to understand

22. **SC.7.L.15.3:** Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

23. **SC.7.L.16.1:** Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another. **Remarks/Examples:**

Integrate HE.7.C.1.4. Describe how heredity can affect personal health.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

24. **SC.7.L.16.2:** Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT **VERY POOR/NO ALIGNMENT**

Justification:

The heredity chapter did not include explicit examples of Punnett squares or work thorough any exersizes on how to estimate probability of genotypes using Punnett squares

25. **SC.7.L.16.3:** Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

A few lessons touch on Mitosis, but the reproduction lessons do not go over meiosis.

26. **SC.7.L.16.4:** Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.

Remarks/Examples:

Integrate HE.7.C.1.4. Describe how heredity can affect personal health.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

27. **SC.7.L.17.1:** Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

28. **SC.7.L.17.2:** Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

29. **SC.7.L.17.3:** Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

30. **SC.7.N.1.1:** Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

Remarks/Examples:

Florida Standards Connections: LAFS.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

31. **SC.7.N.1.2:** Differentiate replication (by others) from repetition (multiple trials).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

No explicit comparison of these terms

32. **SC.7.N.1.3:** Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

33. **SC.7.N.1.4:** Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

34. **SC.7.N.1.5:** Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

35. **SC.7.N.1.6:** Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

36. **SC.7.N.1.7:** Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

37. **SC.7.N.2.1:** Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

38. **SC.7.N.3.1:** Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

39. **SC.7.N.3.2:** Identify the benefits and limitations of the use of scientific models.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

40. **SC.8.L.18.1:** Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

41. **SC.8.L.18.2:** Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

42. **SC.8.L.18.3:** Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

43. **SC.8.L.18.4:** Cite evidence that living systems follow the Laws of Conservation of Mass and Energy.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

44. **SC.8.N.1.1:** Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

45. **SC.8.N.1.2:** Design and conduct a study using repeated trials and replication.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

46. **SC.8.N.1.3:** Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

47. **SC.8.N.1.4:** Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

48. **SC.8.N.1.5:** Analyze the methods used to develop a scientific explanation as seen in different fields of science.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

49. **SC.8.N.1.6:** Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

50. **SC.8.N.2.1:** Distinguish between scientific and pseudoscientific ideas.

Remarks/Examples:

Science is testable, pseudo-science is not science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

51. **SC.8.N.2.2:** Discuss what characterizes science and its methods.

Remarks/Examples:

Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

52. **SC.8.N.3.1:** Select models useful in relating the results of their own investigations.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

53. **SC.8.N.3.2:** Explain why theories may be modified but are rarely discarded.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

54. **SC.8.N.4.1:** Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

55. **SC.8.N.4.2:** Explain how political, social, and economic concerns can affect science, and vice versa.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

56. **SC.912.L.14.2:** Relate structure to function for the components of plant and animal cells. Explain the role of cell membranes as a highly selective barrier (passive and active transport).

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

57. **SC.912.L.14.3:** Compare and contrast the general structures of plant and animal cells. Compare and contrast the general structures of prokaryotic and eukaryotic cells.

Remarks/Examples:

Annually Assessed on Biology EOC. Also assesses SC.912.L.14.2.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

58. **SC.912.L.15.6:** Discuss distinguishing characteristics of the domains and kingdoms of living organisms.

Remarks/Examples:

Annually Assessed on Biology EOC. Also assesses SC.912.L.15.4 SC.912.L.15.5 SC.912.N.1.3 and SC.912.N.1.6.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

59. **SC.912.L.15.13:** Describe the conditions required for natural selection, including: overproduction of offspring, inherited variation, and the struggle to survive, which result in differential reproductive success.

Remarks/Examples:

Annually assessed on Biology EOC. Also assesses SC.912.L.15.14, SC.912.L.15.15, and SC.912.N.1.3.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

60. **SC.912.L.16.2:** Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic, and multiple alleles.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

61. **SC.912.L.16.14:** Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

62. **SC.912.L.16.16:** Describe the process of meiosis, including independent assortment and crossing over. Explain how reduction division results in the formation of haploid gametes or spores.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT
Justification:
Needs more elaboration

63. **SC.912.L.17.6:** Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

64. **SC.912.L.17.9:** Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.

Remarks/Examples:

Annually assessed on Biology EOC. Also assesses SC.912.E.7.1.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

65. **SC.912.L.18.7:** Identify the reactants, products, and basic functions of photosynthesis.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

66. **SC.912.L.18.8:** Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

67. **SC.912.L.18.9:** Explain the interrelated nature of photosynthesis and cellular respiration.

Remarks/Examples:

Annually assessed on Biology EOC. Also assesses SC.912.L.18.7 SC.912.L.18.8 SC.912.L.18.10.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

68. **LAFS.68.RST.1.1:** Cite specific textual evidence to support analysis of science and technical texts.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

69. **LAFS.68.RST.1.2:** Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

70. **LAFS.68.RST.1.3:** Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

71. **LAFS.68.RST.2.4:** 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 6–8 texts and topics.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

72. **LAFS.68.RST.2.5:** Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

73. **LAFS.68.RST.2.6:** Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

74. **LAFS.68.RST.3.7:** Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

75. **LAFS.68.RST.3.8:** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

76. **LAFS.68.RST.3.9:** Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

77. **LAFS.68.WHST.1.1:** Write arguments focused on discipline-specific content.

- Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
- Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
- Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
- Establish and maintain a formal style.
- Provide a concluding statement or section that follows from and supports the argument presented.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

78. **LAFS.68.WHST.1.2:** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

- Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
- Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
- Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
- Use precise language and domain-specific vocabulary to inform about or explain the topic.
- Establish and maintain a formal style and objective tone.
- Provide a concluding statement or section that follows from and supports the information or explanation presented.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

79. **LAFS.68.WHST.2.4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT

Justification:

Clear and coherent, but it is not likely suited for the targeted audience

80. **LAFS.68.WHST.2.5:** With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT

Justification:

81. **LAFS.68.WHST.2.6:** Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

82. **LAFS.68.WHST.3.7:** Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

83. **LAFS.68.WHST.3.8:** Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

84. **LAFS.68.WHST.3.9:** Draw evidence from informational texts to support analysis reflection, and research.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

85. **LAFS.68.WHST.4.10:** 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.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

86. **LAFS.7.SL.1.2:** Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

87. **LAFS.7.SL.1.3:** Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

88. **LAFS.7.SL.2.4:** Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

89. **LAFS.7.SL.2.5:** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

90. **MAFS.6.EE.3.9:** Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.

VERY GOOD ALIGNMENT **GOOD ALIGNMENT** FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

91. **MAFS.6.SP.2.4:** Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

92. **MAFS.6.SP.2.5:** Summarize numerical data sets in relation to their context, such as by:

a. Reporting the number of observations.

b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

93. **MAFS.7.SP.2.4:** Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

94. **MAFS.7.SP.3.5:** Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.

VERY GOOD ALIGNMENT GOOD ALIGNMENT **FAIR ALIGNMENT** POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

95. **HE.6.C.1.8:** Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors.

Remarks/Examples:

Obesity related to poor nutrition and inactivity, cancer and chronic lung disease related to tobacco use, injuries caused from failure to use seat restraint, and sexually transmitted diseases caused by sexual activity.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

96. **HE.7.C.1.3:** Analyze how environmental factors affect personal health.

Remarks/Examples:

Food refrigeration, appropriate home heating and cooling, air/water quality, and garbage/trash collection.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

97. **HE.7.C.1.7:** Describe how heredity can affect personal health.

Remarks/Examples:

Sickle-cell anemia, diabetes, and acne.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT POOR ALIGNMENT VERY POOR/NO ALIGNMENT
Justification:

98. **ELD.K.12.ELL.SC.1:** English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT
Justification:

The material is difficult for an English-native to comprehend, so I imagine an English-learner would have difficulty

99. **ELD.K.12.ELL.SI.1:** English language learners communicate for social and instructional purposes within the school setting.

VERY GOOD ALIGNMENT GOOD ALIGNMENT FAIR ALIGNMENT **POOR ALIGNMENT** VERY POOR/NO ALIGNMENT
Justification:
same as above