

INSTRUCTIONAL MATERIALS ADMINISTRATOR

BID 3341

Recommendation

No

Comments: This material frustrated me. I felt that the overall teaching strategy shown in the video was exciting and I wanted to see exactly how it was presented. However when I looked at the content I feel that it was not adequately covered and there needed to be a lot more background information. Specifically there was no mention of Newton's laws and no formal differentiation of laws and theories. The foundation of physical science is very math based and there was very little math practice in this material. Students would be lacking when they took high school classes based on the information that was presented in this curriculum.

Material for Review

Course: M/J Physical Science (2003010)

Title: Amplify Science: Florida Edition - Physical Science , Edition: 2018 Florida Edition

Copyright: 2016

Author: Lawrence Hall of Science

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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- Additional information regarding the Content, Presentation, and Learning requirements are located in the Science K-12 Specifications for the 2017-18 Florida State Adoption of Instructional Materials.

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 curriculum 1. 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:

This product does not include enough reading or math.

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:

There is just not enough reading.

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:

This product would frustrate me as a teacher and leave me looking for more resources frequently to meet and teach the standards required by the state.

B. Level of Treatment 4. 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:

There were good details in what was provided but it needed more text and more opportunities to evaluate graphs and simulations.

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:

It needs more reading material.

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:

Students would have to fill in large gaps of information on their own or the teacher would have to provide a lot of additional teaching materials.

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:

C. Expertise for Content Development 8. 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:

What was provided was good, it just needs more text and more details on all of the topics.

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 Content 10. 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 content was accurate.

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:

I found no bias.

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:

This appeared to be written by an English teacher. A science teacher would put more about scientific theories and better explanations of scientific concepts.

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:

I found no information that was not factual.

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:

There just wasn't enough content.

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:

There needs to be more explanations to build up the concepts before some of the activities. This should not be left up to the teacher to discuss. Although the teacher does discuss these things, the students need that background information to fall back on.

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 technology platform is good for middle school mostly. There needs to be more opportunities though for math practice on paper.

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:

The real world examples in the articles were interesting and relevant.

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:

The internship activity included poor socioeconomic conditions. I didn't see much else with regards to interdisciplinary connections.

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:

There were good examples of different cultures and groups.

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:

This material needs a lot more solid information included in a text for and in math practice.

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:

This resource did not give a good solid background for the information being taught. Students and teachers would have to use outside sources to learn and teach the required standards.

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:

I didn't see things included that did not align with the standards. i just found that the information was seriously lacking what students and teachers need to learn and teach the required standards.

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:

They were logically organized.

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 materials needed more narratives to build up and provide a basis for the material being presented.

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:

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:

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:

It was presented fine but the content was lacking.

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:

I liked the interactive nature of the SIMS and of the science seminars and the sorting tools.

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:

The big ideas were there but not covered thoroughly enough for what I would need as a teacher.

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:

There needed to be more academic explanations. I liked the idea of all of the application but students cannot discuss formal education if they do not understand the goal of learning scientific laws and theories and exactly what those laws and theories represent. I feel as if students would have information that might seem extraneous until they took a different science class to hopefully understand the purpose of the hands on activities that they did in this class.

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 science seminars did help for students to solidify the ideas that they were learning about the topics.

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:

Students with very little science background would have a difficult time understanding some of the content because there was not enough solid text explanations of the content.

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:

There could be many more labs for students in physical science.

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:

F. Targeted Instructional Strategies 8. 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:

I loved their overall approach to the teaching strategy. However there was not an appropriate core of information. Students need to review previously learned content in some form and have an idea for where they are going with their information. Having lesson objectives would improve this curriculum.

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:

I feel like the content did not back up the strategies that they are using.

G. Targeted Assessment Strategies 10. 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:

I did not see assessment strategies except on the fly strategies. The assessments that I did find were locked.

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:

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:

Students with little science background would not understand this material as it is presented.

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:

This needs MUCH more math practice. Mean, median and mode was in a teacher suggestion. This should be more than common in a physical science classroom.

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:

This does not give enough reading or math practice for adequate learning in my opinion.

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.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:

2. **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:

Using the links provided by the company I see no formal mention of replication.

3. **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:

Using the links provided by the company I see no discussion or reading about different kinds of scientific investigations.

4. **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:

Students are given problems and asked to design experiments and find evidence.

5. **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:

The students see examples of and use creativity but may not recognize it as such because there is no formal mention of the idea.

6. **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:

I see no reference to other kinds of reasoning such as religion or any types of pseudoscience. The link for lesson provided teaches about argumentation and evidence but does not distinguish why something would not be considered "evidence" or relevant.

7. **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:

There are many historical examples that could be used to teach this lesson and there are not any in the provided materials. The link referenced an article that was not provided in the lesson.

8. **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:

There seems to be ample teaching of this standard.

9. **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:

The articles referenced discuss a scientific law and a scientific theory. Any differences must be figured out by the student.....

10. **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:

The article about Boyle's law is missing. Mentioning a law in articles does not teach about the nature of a scientific law compared to a societal law.

11. **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:

There are 2 laws referenced here. There should be many references to Newton's laws in a physical science textbook of any kind.

12. **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:

13. **SC.6.P.11.1:** Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa.

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

Justification:

14. **SC.6.P.12.1:** Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically and, MAFS.K12.MP.6: Attend to precision.

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

Justification:

1 graph..... physical science should have many of these

15. **SC.6.P.13.1:** Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational.

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

Justification:

Did not see any teaching of contact forces

16. **SC.6.P.13.2:** Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are.

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

Justification:

Enjoyed the article about black holes

17. **SC.6.P.13.3:** Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both.

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

Justification:

No formal mention of unbalanced forces.

18. **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:

19. **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:

The example provided does not teach the students the difference between replication and repetition or why both are important in science.

20. **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:

While students are doing a variety of experiments, there is no point in which the different types of experiments/science is pointed out. Students would not be able to explain that not all scientific knowledge is derived from experimentation based on the lessons provided.

21. **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:

These words should be used in the vocabulary and in readings related to this topic. I have not found them yet.

22. **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:

23. **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:

Although students are collecting empirical evidence, they do not recognize it as such. If they were asked about empirical evidence after being taught this curriculum they would not know what it was in reference to.

24. **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:

There are many better examples to use to teach about scientific debate than the ones listed.

25. **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:

This article has been referenced at least 4 or 5 times but the article is not in the link provided.

26. **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:

The text gives a couple of examples of laws and theories but does not give an explanation of their differences.

27. **SC.7.N.3.2:** Identify the benefits and limitations of the use of scientific models. Thus, the use of the term theory in science is very different than how it is used in everyday life.

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:

Students use/observe a variety of models but would not be able to explain the benefits and limitations of the different types based on the lessons presented.

28. **SC.7.P.10.1:** Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors.

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

Justification:

29. **SC.7.P.10.2:** Observe and explain that light can be reflected, refracted, and/or absorbed.

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

Justification:

This concept would be better taught with some reading explanation of what reflection, refraction and absorption means.

30. **SC.7.P.10.3:** Recognize that light waves, sound waves, and other waves move at different speeds in different materials.

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

Justification:

The article about swimming was a good demonstration of this concept.

31. **SC.7.P.11.1:** Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state.

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

Justification:

I enjoyed the article about water changing states.

32. **SC.7.P.11.2:** Investigate and describe the transformation of energy from one form to another.

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

Justification:

Loved the article about transferring human energy into different kinds of energy. The SIM was alright.

33. **SC.7.P.11.3:** Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another.

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

Justification:

The students learn the content in the readings and simulations but they do not the formal teaching of the law of conservation of energy. Students need to be able to recite the law of conservation of energy as well as understand it.

34. **SC.7.P.11.4:** Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature.

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

Justification:

35. **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:

Loved the evidence gradient and the sorting tool along with the observations of the unknown substance.

36. **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:

In the referenced link there was no activity titled "testing incubator designs".

37. **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:

38. **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:

The concept is only taught indirectly.

39. **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:

This is only taught indirectly.

40. **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:

The students practice these ideas but are only taught the concepts indirectly.

41. **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:

This is left up to the teacher in a discussion.

42. **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:

I really like the reasoning tool - I had to find the lesson because the link provided for the lesson did not go to the lesson that was referenced. I feel like students do this to some extent but would not be able to explain the concept.

43. **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:

There is a lot of models in this curriculum but I do not see where there is teaching about models - only using them. Students should be able to explain. I did not find the point of the simulation provided.

44. **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:

The referenced article is missing.

45. **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:

The referenced lessons show how science is used at a school level and community level but not state, national or international levels.

46. **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:

47. **SC.8.P.8.1:** Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.

Remarks/Examples:

Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.

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

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

Justification:

The SIM was good for this modeling activity. It would have been better if there had been some explanation along with the model.

48. **SC.8.P.8.2:** Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass.

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

Justification:

Good article but should discuss weight as a "function" of gravity. It hints at it but could do much better at explaining.

49. **SC.8.P.8.3:** Explore and describe the densities of various materials through measurement of their masses and volumes.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically and, MAFS.K12.MP.6: Attend to precision.

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

Justification:

I like the comparison using the cups and liquids. I would like to see much more comparisons in density for physical science though.

50. **SC.8.P.8.4:** Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.

Remarks/Examples:

Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically and, MAFS.K12.MP.6: Attend to precision.

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

Justification:

The students learn about some of the properties of substances but only practice with density and magnetism. This could be a very good opportunity for students to do a lot more hands on - like with the properties of rocks.....

51. **SC.8.P.8.5:** Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.

Remarks/Examples:

Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions.

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

Justification:

I really like the SIM - it would have been cool to see a video of some of the reactions - like water and sodium.

52. **SC.8.P.8.6:** Recognize that elements are grouped in the periodic table according to similarities of their properties.

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

Justification:

I wish that there was more than just 1 article on this topic.

53. **SC.8.P.8.7:** Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).

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:

There is only 1 article..... this is such a major part of physical science I feel that it deserves more teaching.

54. **SC.8.P.8.8:** Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts.

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

Justification:

Some reference was made in the article about atomic theory. However, the referenced article was either not there, or it was locked. That particular lesson was "locked".

55. **SC.8.P.8.9:** Distinguish among mixtures (including solutions) and pure substances.

Remarks/Examples:

Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions).

Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes.

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

Justification:

The referenced article is "locked".

56. **SC.8.P.9.1:** Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes.

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

Justification:

Good article about Lavoisier and the simulation. I'm not sure if students will connect the two on their own though.

57. **SC.8.P.9.2:** Differentiate between physical changes and chemical changes.

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

Justification:
Good article.

58. **SC.8.P.9.3:** Investigate and describe how temperature influences chemical changes.

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

Justification:
Students analyze 1 set of data.....

59. **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:

60. **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:

61. **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:

62. **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:

63. **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:

64. **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:

65. **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:

This text would be better with more charts and graphs that students have to interpret.

66. **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:

This is possibly good alignment but I could not see the evidence from the "evidence cards" so therefore I have no idea if it actually does what it is supposed to. The science seminar seems like a good tool for this so I gave it a "fair alignment".

67. **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:

SIM and articles to align on some units.

68. **LAFS.68.RST.4.10:** By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.

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

Justification:

This program needs additional text in all chapters.

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

a. 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.

- b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
- c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
- d. Establish and maintain a formal style.
- e. 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:

The evidence claim tool used for scientific evidence could be used in a language arts setting as well.

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

- a. 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.
- b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
- c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
- d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
- e. Establish and maintain a formal style and objective tone.
- f. 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:

71. **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:

72. **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:

I did not much revising or editing/rewriting.

73. **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:

Students submit assignments on a digital platform.

74. **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:

75. **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:

This particular title needs more/multiple print sources for information.

76. **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:

77. **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:

78. **LAFS.8.SL.1.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
- c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
- d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

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

Justification:

There are many activities that encourage students to discuss and debate the content in the chapters. I do like this aspect of the text.

79. **LAFS.8.SL.1.2:** Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

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

Justification:

80. **LAFS.8.SL.1.3:** Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

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

Justification:

The science seminars provide a lot of time and organization for student observations and claims.

81. **LAFS.8.SL.2.4:** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.

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

Justification:

The science seminars provide a lot of time and organization for student observations and claims.

82. **LAFS.8.SL.2.5:** Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

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

Justification:

Lots of videos and SIM activities

83. **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:

There was very little of this for what should be included in a physical science textbook.

84. **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:

This is included in an instructional suggestion. This should be mandatory in all physical science classes. Math is the foundation of physical science.

85. **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:

This was not adequately covered.

86. **MAFS.8.F.2.5:** Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

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

Justification:

This is only included in instructional suggestions. This should be a very common part of a physical science text.

87. **MAFS.8.G.3.9:** Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Remarks/Examples:

Fluency Expectations or Examples of Culminating Standards

When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers.

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

Justification:

88. **ELD.K12.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:

89. **ELD.K12.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: