INSTRUCTIONAL MATERIALS ADMINISTRATOR

BID 3352

Recommendation

Yes

Comments: Overall I really liked the content and the delivery method of this book. I like the way that students interact with the text and videos before they progress and I absolutely loved all of the demonstrations and simulations. The only drawback that I had for this curriculum is that many of the nature of science standards were simply implied, rather than taught to the students. If the company were to add more formal education about the nature of science standards then this book would be a VERY good book to use. As it is, it is still a good book, however as a teacher, I would be looking for additional resources to cover the nature of science standards that the students are tested on at the end of 8th grade (consequently at the end of this course).

Material for Review

Course: M/J Physical Science, Advanced (2003020)
Title: Science Bits - M/J Physical 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
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3 - FAIR ALIGNMENT
2 - POOR ALIGNMENT
1 - VERY POOR/NO ALIGNMENT

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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 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 was actually between good and fair. The nature of science content needed to be better taught for many of the concepts that were "integrated into all units".

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:

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:

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:
Again, it needs more formal instruction on nature of science.

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:
I liked all of the built in questions and practice simulations.

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:

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:
I feel like this is a good number of units to teach in a class year.

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:

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:

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:
Students have to draw their own conclusions about the information being presented.

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:
There was a lot of very good content.

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 one question where no of the answers were exactly correct.

E. Currency of Content14. 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:
I loved the way the simulations worked to show the students the entire process.

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:
Some schools without enough technology would still struggle with the presentation of this content.

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:
I believe the intended learners would gain a lot from using this curriculum.

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:

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:
There were not any/many pictures of entire people. Most videos showed a person's hands only.

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 Resources 1. 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 teacher will need to prepare additional teaching materials for the nature of science standards that are not covered well.

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:
If the publisher had put more formal nature of science information into the curriculum, this product would be about perfect.

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:
The organization may be changed by the teacher.

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:
Every single demonstration was interesting and useful, as well as the simulated labs.

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:
I believe students would do well with this.

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:
Closed captioning for the videos would have been very good.

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 site was easy to navigate through and had very practical places for students and teachers to interact with the material.

Learning

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A. Motivational Strategies1. A. Instructional materials include features to maintain learner motivation.

◉ **VERY GOOD ALIGNMENT**   ○ GOOD ALIGNMENT   ○ FAIR ALIGNMENT   ○ POOR ALIGNMENT   ○ VERY POOR/NO ALIGNMENT
Justification:
The demonstrations were very interesting compared to others that I have witnessed.

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:
yes but needed a lot more nature of science.

C. Explicit Instruction3. 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 are good objectives with every unit.

D. Guidance and Support4. 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 curriculum gives the students opportunities to design their own experiments to solve problems.

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 teacher can start and stop the presentation and guide students as much as needed.

E. Active Participation of Students6. 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:

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:
All of the simulated labs and questions were very logical extensions of the content being taught.

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:
Yes, the materials were in electronic format and were interesting to the student and teacher.

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:

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:
I wish their had been a more formal testing option.

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:
Teachers can gauge a student's progress by the inputs into the curriculum.

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:

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:

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:

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.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:
Loved the roller coaster simulation.

2. **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:
Loved the practice exercises and the different ways that speed was measured. This was a great visual for students.

3. **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:
Covered well in the Forces unit

4. **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:
The interactive simulation was nice but should have included distance and mass

5. **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:

6. **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:
Students do simulated experiments (like using the Phenolpthalein to find blood). Students have to carefully follow instructions or the sim will not work.

7. **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:
Students did replication in some of the activities but I did not see any formal mention of replication or repetition. Students should have a formal teaching on this and be able to explain the differences and why both are important.

8. **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:
Students practice looking at different questions and deciding if they can be answered with science.

9. **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:
I did not see this integrated into the units. The students did simulations that demonstrated principals and watch demonstrations that were excellent. However, they were not identifying the variables that were involved as independent and dependent variables. The terminology was introduced in the last unit only.

10. **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:
I did not see good examples of this.

11. **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:
This should be taught formally but I do not recall seeing the term empirical evidence. The curriculum does well at making observations and interpreting them, however the topic of empirical evidence was not discussed.

12. **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:
Some general science was integrated but not formally taught. I did not see anything about any historical scientific debates or even discussion about disagreements between student scientists.

13. **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:
I did not find this.

14. **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:
Students practice identifying laws and theories.

15. **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 a variety of models in their lessons.

16. **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:
Good pictures and demonstrations

17. **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:
Great pictures and demonstrations

18. **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:

19. **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:
Good demonstrations about the movement of particles

20. **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:
Students have several examples and opportunities to explore transformation of energy.

21. **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:

22. **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:
The dye spreading out in the water was a good demonstration.

23. **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:

24. **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:
Students most likely did repeated trials, however it was not discussed as a concept formally. I would have liked to see a discussion on this.

25. **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:
There were a couple of places that students would have been able to use this terminology. It would have been better if such terminology

had been taught also.

26. **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:
It is possible that students made and changed a hypothesis at some point, however this topic was not formally addressed.

27. **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:
Different fields of science were only briefly mentioned.

28. **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:
This standard was modeled many times, however there was no formal teaching of the ideas.

29. **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:
I liked the project on astrology.

30. **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:
This was modeled many times. However it was never stated.

31. **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:
Students were given many models to do, however they were not selecting the types of models.

32. **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 text seemed to suggest that all theories are eventually discarded.

33. **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:
There was some of this in a historical context but not much.

34. **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:
There was some of this in a historical context but not much.

35. **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:
This was covered well in the atoms unit.

36. **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:
I liked the simulation on weight on different planets. I think it was very useful to demonstrate the idea of gravity.

37. **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:
awesome experiment simulations and videos

38. **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:
This was covered in a few different units.

39. **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:
Mendeleev's work on the periodic table.

40. **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:
This was good.

41. **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:

42. **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:
It covered acids and bases and salts to different degrees.

43. **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:
Good demonstration about filtering dirty water.

44. **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:
The demonstrations on the balance were very good - along with the demonstration with the gas that pushes the cork out.

45. **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:
Showing the densities change as things were being burned is a helpful video to show students.

46. **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:
There are a several simulations showing the relationships of temperature and chemical changes.

47. **SC.912.P.8.1:** Differentiate among the four states of matter.

Remarks/Examples:

Differentiate among the four states of matter (solid, liquid, gas and plasma) in terms of energy, particle motion, and phase transitions. (Note: Currently five states of matter have been identified.)

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

Justification:
No reference to plasma.

48. **SC.912.P.8.2:** Differentiate between physical and chemical properties and physical and chemical changes of matter.

Remarks/Examples:

Discuss volume, compressibility, density, conductivity, malleability, reactivity, molecular composition, freezing, melting and boiling points. Describe simple laboratory techniques that can be used to separate homogeneous and heterogeneous mixtures (e.g. filtration, distillation, chromatography, evaporation).

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

Justification:

49. **SC.912.P.8.4:** Explore the scientific theory of atoms (also known as atomic theory) by describing the structure of atoms in terms of protons, neutrons and electrons, and differentiate among these particles in terms of their mass, electrical charges and locations within the atom.

Remarks/Examples:

Explain that electrons, protons and neutrons are parts of the atom and that the nuclei of atoms are composed of protons and neutrons, which experience forces of attraction and repulsion consistent with their charges and masses.

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.912.P.8.5:** Relate properties of atoms and their position in the periodic table to the arrangement of their electrons.

Remarks/Examples:

Use the periodic table and electron configuration to determine an element's number of valence electrons and its chemical and physical properties. Explain how chemical properties depend almost entirely on the configuration of the outer electron shell.

   ⦿ **VERY GOOD ALIGNMENT**   ○ GOOD ALIGNMENT   ○ FAIR ALIGNMENT   ○ POOR ALIGNMENT   ○ VERY POOR/NO ALIGNMENT
   Justification:
   Shows a good history of Mendeleev and the periodic table and how it is arranged.

51. **SC.912.P.8.7:** Interpret formula representations of molecules and compounds in terms of composition and structure.

   Remarks/Examples:
   Write chemical formulas for simple covalent (HCl, SO2, CO2, and CH4), ionic (Na+ + Cl- +NaCl) and molecular (O2, H2O) compounds. Predict the formulas of ionic compounds based on the number of valence electrons and the charges on the ions.

   ○ VERY GOOD ALIGNMENT   ○ GOOD ALIGNMENT   ○ FAIR ALIGNMENT   ⦿ **POOR ALIGNMENT**   ○ VERY POOR/NO ALIGNMENT
   Justification:
   Didn't see many formulas.

52. **SC.912.P.8.11:** Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.

   Remarks/Examples:
   Use experimental data to illustrate and explain the pH scale to characterize acid and base solutions. Compare and contrast the strengths of various common acids and bases.

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

53. **SC.912.P.10.1:** Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.

   Remarks/Examples:
   Differentiate between kinetic and potential energy. Recognize that energy cannot be created or destroyed, only transformed. Identify examples of transformation of energy: Heat to light in incandescent electric light bulbs Light to heat in laser drills Electrical to sound in radios Sound to electrical in microphones Electrical to chemical in battery rechargers Chemical to electrical in dry cells Mechanical to electrical in generators [power plants] Nuclear to heat in nuclear reactors Gravitational potential energy of a falling object is converted to kinetic energy then to heat and sound energy when the object hits the ground.

   ⦿ **VERY GOOD ALIGNMENT**   ○ GOOD ALIGNMENT   ○ FAIR ALIGNMENT   ○ POOR ALIGNMENT   ○ VERY POOR/NO ALIGNMENT
   Justification:
   Many good demonstrations.

54. **SC.912.P.10.4:** Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter.

   ⦿ **VERY GOOD ALIGNMENT**   ○ GOOD ALIGNMENT   ○ FAIR ALIGNMENT   ○ POOR ALIGNMENT   ○ VERY POOR/NO ALIGNMENT
   Justification:
   Good reading, application and demonstration

55. **SC.912.P.10.5:** Relate temperature to the average molecular kinetic energy.

   Remarks/Examples:
   Recognize that the internal energy of an object includes the energy of random motion of the object's atoms and molecules, often referred to as thermal energy.

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

56. **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:
   Students do a report and give textual evidence

57. **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:
   This curriculum has very good built-in questions.

58. **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:
This is common in the simulated labs

59. **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:

60. **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:

61. **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:

62. **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 curriculum includes many examples of information with graphs

63. **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:

64. **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:
Each lesson has great demonstrations along with textual information and practice simulations for students.

65. **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:
The complexity of this text is in line with middle school readers.

66. **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:
Lesson include writing about newfound learning. Students then take their writing to someone who does not know about their topic and present to them and explain to them the topic.

67. **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:

68. **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:

69. **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:

70. **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:

71. **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:

72. **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:

73. **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:

74. **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:
This book had students answer short questions, but no long reading passages.

75. **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:

76. **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:

77. **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:

78. **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:

79. **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:
Students make a powerpoint presentation.

80. **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:
I did not see this at all.

81. **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:
I did not see this at all.

82. **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:
Lots of graphs

83. **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:

84. **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:

85. **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: