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| **[Teaching Next Generation Science Standards](http://www.lewiscenter.org/AAE/Departments/Science/Teaching-the-Next-Generations-Science/) -** [**Planning**](http://www.cde.ca.gov/pd/ca/sc/documents/scienceimplementationplan120214.pdf) **Units of Study** |
| **Teacher:** | [**Subject**](http://nstahosted.org/pdfs/ngss/20130509/AppendixA-ConceptualShiftsInTheNextGenerationScienceStandards.pdf)**:** | **Grade:** |
| [**UNIT**](http://ngss.nsta.org/appendix-c-college-and-career-readiness.aspx)**:** | **Time Frame:** |
| [**CURRICULUM**](https://www.educateiowa.gov/sites/files/ed/documents/IowaScienceStandardsImplementationPlan_0.pdf) **/** [**SCIENCE**](https://www.educateiowa.gov/sites/files/ed/documents/2015-08-06ScienceStandardsReviewTeamReport.pdf) **LEARNING** [**TARGETS**](http://www.nextgenscience.org/sites/default/files/How%20to%20Read%20NGSS%20-%20Final%2008.19.13.pdf) |
| * Grade-appropriate elements of the [science and engineering practice(s),](http://www.nextgenscience.org/sites/default/files/Appendix%20F%20%20Science%20and%20Engineering%20Practices%20in%20the%20NGSS%20-%20FINAL%20060513.pdf) disciplinary core idea(s), and crosscutting concept(s), work together to support students in [three-dimensional learning](http://www.nextgenscience.org/three-dimensions) to make [sense of phenomena](http://stemteachingtools.org/brief/20) and/or to design solutions to problems.
1. Provides opportunities to [develop](http://stemteachingtools.org/brief/2) and use [specific elements of the practice(s) to make sense](http://stemteachingtools.org/brief/3) of phenomena and/or to design solutions to problems.
2. Provides opportunities to develop and use specific elements of the disciplinary core idea(s) to make sense of phenomena and/or to design solutions to problems.
3. Provides opportunities to develop and use specific elements of the crosscutting concept(s) to make sense of phenomena and/or to design solutions to problems.
4. The [three dimensions](https://www.youtube.com/playlist?list=PLllVwaZQkS2rtZG_L7ho89oFsaYL3kUWq) work together to support students to make sense of phenomena and/or to design solutions to problems.
* Lessons fit together coherently targeting a set of performance expectations.
1. Each lesson links to previous lessons and provides a need to engage in the current lesson.
2. The lessons [help students](https://www.teachingchannel.org/videos/student-collaboration-achieve) develop proficiency on a targeted set of [performance expectations](http://ngss.nsta.org/how-to-read-the-ngss.aspx).
* Where appropriate, disciplinary core ideas from different disciplines are used together to explain phenomena.
* Where appropriate, [crosscutting concepts](https://www.teachingchannel.org/videos/crosscutting-concepts-achieve) are used in the explanation of phenomena from a variety of disciplines.
* Provides [grade-appropriate connection](http://nstahosted.org/pdfs/ngss/resources/201212_Framework-MayesKoballa.pdf)(s) to the Core [State Standards in Mathematics](http://nstahosted.org/pdfs/ngss/AppendixL-CCSSMathConnections-6.3.13.pdf) [and/or](http://ell.stanford.edu/sites/default/files/VennDiagram_practices_v11%208-30-13%20color.pdf) English Language Arts & Literacy in History/Social Studies, [Science and Technical Subjects](http://nstahosted.org/pdfs/ngss/AppendixM-ConnectionsToTheCCSSForLiteracy-6.12.13.pdf).
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| [**ESSENTIAL QUESTION**](http://www.ascd.org/publications/books/109004/chapters/What-Makes-a-Question-Essential%EF%BF%BD.aspx) **/ BIG UNDERSTANDING** |
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| **Potential Science** [**MISCONCEPTIONS**](http://undsci.berkeley.edu/teaching/misconceptions.php) |
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| [**Disciplinary Core Idea**](http://nstahosted.org/pdfs/ngss/20130509/AppendixE-DCIProgressionsWithinNGSS_1.pdf) **and Code** | **SCIENCE** [**Performance Expectations**](https://iowacore.gov/sites/default/files/newsciencestandards-2015-08-06.docx) **(PE, Clarification Statement and boundary) to be** [**bundled**](http://www.nextgenscience.org/glossary/bundlesbundling) **with practices and crosscutting concepts:** | [**Science and Engineering**](http://nstahosted.org/pdfs/ngss/MatrixOfScienceAndEngineeringPractices.pdf) **Practices:** | [**Crosscutting**](http://nstahosted.org/pdfs/ngss/MatrixOfCrosscuttingConcepts.pdf)[**Concepts**](http://www.nextgenscience.org/sites/default/files/Appendix%20G%20-%20Crosscutting%20Concepts%20FINAL%20edited%204.10.13.pdf)**:** |
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| **ELA Code** | **Science Literacy Learning Targets Helping Build Deeper Science Understanding** |
| * Targets a set [of grade-level ELA / Literacy CCSS](http://misiciowa.org/member-resources/by-subject/) for teaching and learning.
* Includes a clear and explicit [purpose for instruction](http://www.nassp.org/Content.aspx?topic=Purpose_The_Foundation_for_High_Quality_Teaching).
* [Integrates reading, writing, speaking and listening](http://achievethecore.org/dashboard/408/search/3/1/0/page/397/using-the-ela-literacy-publishers-criteria-to-better-understand-the-standards) so that students [apply and synthesize advancing literacy skills](http://nstahosted.org/pdfs/ngss/resources/201211_Framework-BellBrickerTzouLeeVanHorne.pdf).
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| **Math Code** | **Math Learning Targets Helping Build Deeper Science Understanding** |
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| **Interdisciplinary Theme:** Which themes can be infused with the content? |
| * Global Awareness
* Financial, Economic, Business and Entrepreneurial Literacy
 | * Civic Literacy
* Health Literacy
* Environmental Literacy
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| [**21st Century Skills**](http://www.p21.org/our-work/p21-framework): Which skills will be incorporated in the instructional design? |
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| **Learning and Innovation Skills** | **Information, Media and Technology Skills** | **Life and Career Skills** |
| * Creativity and Innovation
* Critical Thinking and Problem Solving
* Communication
* Collaboration
 | * Information Literacy
* Media Literacy
* ICT (Information, Communications and Technology) Literacy
 | * Flexibility / Adaptability
* Initiative / Self-Direction
* Social /Cross-Cultural Skills
* Productivity /Accountability
* Leadership / Responsibility
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| **Science Literacy (Text set)** |
| * [Selects texts that measure](http://www.louisianabelieves.com/docs/teacher-toolbox-resources/guide---how-to-determine-text-complexity-grades-k-12.pdf?sfvrsn=5) within the grade-level [text complexity](http://achievethecore.org/page/642/text-complexity-collection) band and are of sufficient quality and scope for the stated purpose.\*\* (i.e., present vocabulary, syntax, text structures, levels of meaning/purpose, and other qualitative characteristics that are similar to CCSS grade-level exemplars [Appendices [A](http://www.corestandards.org/assets/Appendix_A.pdf) /[B](http://www.corestandards.org/assets/Appendix_B.pdf)
* **Increasing** [**Text Complexity**](https://www.teachingchannel.org/videos/simplifying-text-complexity)**:** Focuses students on reading of a progression of complex texts drawn from the grade-level band. Provides text-centered learning that is sequenced, scaffolded, and supported to advance students toward independent reading of complex texts at the CCR level.
* [**Balance of Texts**](http://www.ascd.org/ascd-express/vol7/721-alterio.aspx)**:** Within a collection of grade level units, a balance of [informational](http://galesites.com/state/iowa/) and literary texts is included according to guidelines in the CCSS.
* **Building Disciplinary Knowledge:** Provides opportunities for students to build knowledge about a topic or subject through analysis of a [coherent selection](http://misiciowa.org/uploads/CCSS_15_CREATING_A_COHESIVE_TEXT_SET_Worksheet.pdf) of strategically sequenced, discipline-specific texts. *(In* ***Grades 3-5****): Build students’ content knowledge and their understanding of reading and writing in social studies, the arts, science or technical subjects through the coherent selection of texts.*
* Indicate how students are accountable for independent reading based on student choice and interest to build stamina, confidence and motivation *(may be more applicable across the year or several units).*
 |
| **TEXT Set**  | [**Type**](http://scboces.org/cms/lib03/NY24000912/Centricity/Domain/138/Grades_6-12_ELA_-_Text_Genres_Brace_Map_-_Submitted%20June__2012.PDF) **of** [**Texts**](http://misiciowa.org/wp-content/uploads/2015/04/CCSS_10_Text_Genres_Chart.pdf) |
| **D** | **L** | **I** |
| Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |
| Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |
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| Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |

D = Digital L=[**Literature**](http://www.cde.ca.gov/ci/rl/cf/documents/appendixasbeadopted.pdf)  I=informational

[**Structure**](http://misiciowa.org/wp-content/uploads/2015/06/CCSS_11_Text_Structure_Cheat_Sheet.pdf)**: C/C = Compare and Contrast C/E = Cause and Effect P/S = Problem/Solution S/O = Sequence/Order D = Description N = Narrative**

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| [**TEXT-BASED QUESTIONS**](http://achievethecore.org/page/710/text-dependent-question-resources) |
| * **Text-Based Evidence:** Facilitates [rich and rigorous evidence-based discussions](https://www.teachingchannel.org/videos/analyzing-text-as-a-group) and writing about common texts through a [sequence of specific, thought-provoking](http://standardstoolkit.dpsk12.org/files/Text_Dependent_Question_Worksheet.pdf), and text-dependent [questions](http://misiciowa.org/uploads/CCSS_18_Questions_Aligned_to_the_CCSS_Standards_Copyright_w_Examples.pdf) (including, when applicable, illustrations, charts, diagrams, audio/video, and media)
* Focuses on challenging sections of text(s) and engages students in a [productive struggle](https://www.teachingchannel.org/videos/using-socratic-seminars-in-classroom) through discussion questions and other supports that build toward independence.
 |
| **Text** | **Question** | Page | **Text** | **Question** | Page |
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| [**ACADEMIC**](http://education.illinoisstate.edu/downloads/casei/AV-2-4%20Appendix_A32-35.pdf)[**VOCABULARY**](http://misiciowa.org/uploads/Instructional_Guide_for_Academic_Vocabulary.pdf)**:** * Focuses on building students’ academic vocabulary in context [throughout instruction](http://www.coloradoedinitiative.org/wp-content/uploads/2014/04/Acdemic-Vocabulary-and-CCSS.pdf).
 |
|  Text | Words to Front-Load | Page(s) | [Words Using Context Clues](http://www.learnnc.org/lp/pages/3971) | Page(s) | Instructional Methods |
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| **Instructional Strategies**  |
| [**Science**](http://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts) |
| * [Engages students in authentic and meaningful scenarios](http://ngss.nsta.org/grounding-practice-in-research.aspx) that reflect the practice of science and engineering as experienced in the real world and that provide students with a purpose (e.g., [making sense of phenomena](https://www.teachingchannel.org/videos/using-phenomena-achieve) and/or designing [solutions to problems](https://www.youtube.com/watch?v=N6jDBqgQnK8&index=5&list=PL2pHc_BEFW2KIK2maL8XW5gCIP1cpHH72)).
1. The context, including phenomena, questions, or problems, motivates students to engage in three-dimensional learning.
2. Provides students with relevant phenomena (either firsthand experiences or through representations) to make sense of and/or relevant problems to solve.
3. Engages students in multiple practices that work together with disciplinary core ideas and crosscutting concepts to support students in making sense of phenomena and/or designing solutions to problems.
4. Provides opportunities for students to connect their explanation of a phenomenon and/or their design solution to a problem to their own experience.
5. When [engineering](https://www.teachingchannel.org/videos/engineering-design-process) performance expectations are included, they are used along with disciplinary core ideas from physical, life, or earth and space sciences.
* Develops deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts by identifying and building on students’ prior knowledge.
* Uses scientifically accurate and grade-appropriate scientific information, phenomena, and representations to support [students’ three-dimensional learning.](https://www.teachingchannel.org/videos/3-dimensional-learning-achieve)
* Provides opportunities for students to [express, clarify, justify](https://www.youtube.com/watch?v=l0-u0gMa-pU), interpret, and represent their ideas and respond to peer and teacher feedback orally and/or in written form as appropriate to support student’s three-dimensional learning.
 |
| **Science Literacy** |
| * [**Reading Text Closely**](http://www.aspendrl.org/portal/browse/CategoryList?categoryId=284)**:** Makes reading text(s) closely, examining textual evidence, and discerning deep meaning [a central focus of instruction](http://achievethecore.org/page/752/featured-lessons).
* [Integrates](https://www.teachingchannel.org/videos/analyzing-text-as-a-group) reading, writing, speaking and listening so that students apply and synthesize advancing literacy skills.
* [Provides for authentic learning, application of literacy skills, student-directed inquiry, analysis, evaluation, and/or reflection](http://odelleducation.com/reading-closely).
* Cultivates student interest and [engagement](http://www.ascd.org/publications/educational-leadership/sept95/vol53/num01/Strengthening-Student-Engagement%40-What-Do-Students-Want.aspx) in reading, writing, and speaking about texts.
* Includes a progression of learning where concepts and/or skills advance and deepen over time. (May be more applicable across the year or several units).
* Uses [technology](http://instructionaltech.browardschools.com/online-resources/technology-and-webbs-depth-of-%20knowledge/) and media to deepen learning and draw attention to evidence and texts as appropriate.
* Addresses instructional expectations and is easy to understand and use.
 |
| **5E Cycle** | [**Instructional**](http://concord.org/ngss/) **Strategies and Activities**  | **Performance Expectations** |
| **DCI** | **SEP** | **CC** |
| **Engage** |  |  |  |  |
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| **Explore** |  |  |  |  |
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| **Explain** |  |  |  |  |
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| **Elaborate** |  |  |  |  |
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| **Evaluate** |  |  |  |  |
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D = Digital L=[**Literature**](http://www.cde.ca.gov/ci/rl/cf/documents/appendixasbeadopted.pdf)  I=informational

[**Structure**](http://misiciowa.org/wp-content/uploads/2015/06/CCSS_11_Text_Structure_Cheat_Sheet.pdf)**: C/C = Compare and Contrast C/E = Cause and Effect P/S = Problem/Solution S/O = Sequence/Order D = Description N = Narrative**

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| [**WRITING**](http://www.corestandards.org/assets/Appendix_C.pdf)[**ASSIGNMENTS**](https://drive.google.com/file/d/0B8uSuej0eWLcU2hhQk96WWVQMDA/view) | [**Type**](https://drive.google.com/file/d/0B8uSuej0eWLcU2hhQk96WWVQMDA/view) | * [**Writing from Sources**](http://www.parcconline.org/mcf/english-language-artsliteracy/writing-texts)**:** Routinely expects that students draw evidence from texts to [produce clear and coherent writing](http://www.doe.k12.de.us/aab/English_Language_Arts/writing_rubrics.shtml) that informs, explains, or makes an argument in various written forms (notes, summaries, short responses, or formal essays).\*\*
* **Balance of Writing:** Includes a balance of on-demand and process writing (e.g. multiple drafts and revisions over time) and short, focused research projects, incorporating digital texts where appropriate.
* Integrates targeted instruction in such areas as grammar and conventions, writing [strategies](http://www.ode.state.or.us/search/page/?id=3907), [discussion rules](http://www.ascd.org/publications/books/108035/chapters/Procedures-for-Classroom-Talk.aspx), and all aspects of [foundational reading for grades 3-5](http://www.fcrr.org/studentactivities/3_5.htm).
* Develops deeper understanding of the [practices](https://www.teachingchannel.org/videos/science-engineering-practices-achieve), [disciplinary core ideas](https://www.teachingchannel.org/videos/disciplinary-core-ideas-achieve), and [crosscutting concepts](https://www.teachingchannel.org/videos/crosscutting-concepts-achieve) by identifying and building on students’ prior knowledge.
* Uses scientifically accurate and grade-appropriate scientific information, phenomena, and representations to support students’ three-dimensional learning.
* Provides opportunities for students to [express, clarify, justify, interpret](http://stemteachingtools.org/brief/6), and represent their ideas and [respond to peer and teacher feedback orally and/or in written form](http://stemteachingtools.org/brief/17) as appropriate to support student’s three-dimensional learning.
 |
| [**A**](http://stemteachingtools.org/brief/1) | **E** | **N** | **R** |
| 🞎 Process 🞎 On Demand | Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |  |
| 🞎 Process 🞎 On Demand | Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |  |
| 🞎 Process 🞎 On Demand | Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |  |
| 🞎 Process 🞎 On Demand | Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |  |
| 🞎 Process 🞎 On Demand | Structure: 🞎 C/C 🞎 C/E 🞎 P/S 🞎 S/O 🞎 D 🞎 N |  |  |  |  |

**A= Argument (supports** [**SEP**](http://nstahosted.org/pdfs/ngss/MatrixOfScienceAndEngineeringPractices.pdf) **7 and 8) E= Explanatory / Informational (support** [**SEP**](http://nstahosted.org/pdfs/ngss/MatrixOfScienceAndEngineeringPractices.pdf) **2 and 8) N= Narrative (Supports** [**SEP**](http://nstahosted.org/pdfs/ngss/MatrixOfScienceAndEngineeringPractices.pdf) **7 and 8) R= Research**

**Structure: C/C = Compare and Contrast C/E = Cause and Effect P/S = Problem/Solution S/O = Sequence/Order D = Description N = Narrative**

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| [**SCAFFOLDING**](http://www.learnnc.org/lp/pages/5074) **for SUCCESS** |
| **Science** | **Science Literacy** |
| * Provides guidance for teachers to support differentiated instruction in the classroom so that [every student’s needs](http://ngss.nsta.org/appendix-d-all-standards-making-the-ngss.aspx) are addressed by including:
1. Suggestions for how to connect instruction to the students' home, neighborhood, community and/or culture as appropriate.
2. Appropriate reading, writing, listening, and/or speaking alternatives (e.g., translations, picture support, graphic organizers) for students who are [English language learners](https://www.teachingchannel.org/videos/ell-support-through-pbl-inps), have special needs, or read well below the grade level.
3. Suggested extra support (e.g., phenomena, representations, tasks) for students who are struggling to meet the performance expectations.
4. Extensions for students with high interest or who have already met the performance expectations to develop deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts.
* Provides supports [to help students engage](http://stemteachingtools.org/brief/27) in the practices as needed and gradually adjusts supports over time so that students are increasingly responsible for making sense of phenomena and/or designing solutions to problems.
* Provides guidance for teachers throughout the unit for how lessons build on each other to support students developing deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts over the course of the unit.
 | * Provides *all* students with multiple opportunities to engage with text of appropriate complexity for the grade level; includes appropriate scaffolding so that students directly experience the complexity of the text.
* Provides extensions and/or more advanced text for students who read well above the grade level text band.
* Gradually removes [supports](https://www.teachingchannel.org/videos/technology-to-help-students-ousd), requiring students to demonstrate their independent capacities. (May be more applicable across the year or several units).
* Integrates [appropriate](http://www.montgomeryschoolsmd.org/departments/hiat-tech/udl/udl-tool-finder.aspx) supports for reading, writing, speaking and listening for students who are ELL, have [disabilities](http://www.cde.ca.gov/sp/se/cc/), or read well below the grade level text band.
 |
| [**Scaffolding**](http://www.livebinders.com/play/play?present=true&id=949877) **/ Intervention Strategies:** | [**UDL**](http://www.udlcenter.org/aboutudl/whatisudl)[**Design for Learning**](http://udlwheel.mdonlinegrants.org/) **Guidelines** |
| **Below Grade Level:** | I. Provide Multiple Means of [**Representation**](http://www.udlcenter.org/implementation/examples)1. Provide options for perception 1.1 Offer ways of customizing the display of information 1.2 Offer alternatives for auditory information 1.3 Offer alternatives for visual information 2. Provide options for language, mathematical expressions, and symbols 2.1 Clarify vocabulary and symbols 2.2 Clarify syntax and structure 2.3 Support decoding of text, mathematical notation, and symbols 2.4 Promote understanding across languages 2.5 Illustrate through multiple media 3. Provide options for comprehension 3.1 Activate or supply background knowledge 3.2 Highlight patterns, critical features, big ideas and  Relationships 3.3 Guide information processing, visualization and manipulation 3.4 Maximize transfer and generalizationII. Provide Multiple Means of [**Action and Expression**](http://www.udlcenter.org/implementation/examples)4. Provide options for physical action 4.1 Vary the methods for response and navigation 4.2 Optimize access to tools and assistive technologies 5. Provide options for expression and communication 5.1 Use multiple media for communication 5.2 Use multiple tools for construction and composition 5.3 Build fluencies with graduated levels of support for  practice and performance 6. Provide options for executive functions 6.1 Guide appropriate goal-setting 6.2 Support planning and strategy development 6.3 Facilitate managing information and resources 6.4 Enhance capacity for monitoring progressIII. Provide Multiple Means of [**Engagement**](http://www.udlcenter.org/implementation/examples) 7. Provide options for recruiting interest 7.1 Optimize individual choice and autonomy 7.2 Optimize relevance, value and authenticity 7.3 Minimize threats and distractions 8. Provide options for sustaining effort and persistence 8.1 Heighten salience of goals and objectives 8.2 Vary demands and resources to optimize challenge 8.3 Foster collaboration and community 8.4 Increase mastery-oriented feedback 9. Provide options for self-regulation 9.1 Promote expectations and beliefs that optimize Motivation 9.2 Facilitate personal coping skills and strategies 9.3 Develop self-assessment and reflection |
| [**ELL**](http://ell.stanford.edu/) **/** [**ELD**](http://www.cde.ca.gov/re/cc/eldresources.asp)**:**  |
| **Above Grade Level:** |

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| [**ASSESSMENT**](http://www.nextgenscience.org/evidence-statements)**:** *The lesson/unit regularly* [*assesses whether students are mastering standards-based content*](http://www.nap.edu/catalog/18409/developing-assessments-for-the-next-generation-science-standards)*.* |
| **Science** | **Science Literacy** |
| * Elicits direct, observable evidence of three-dimensional learning by students using practices with core ideas and crosscutting concepts to make sense of phenomena and/or to design solutions.
* [Formative assessments of three-dimensional learning are embedded throughout the instruction](http://stemteachingtools.org/brief/18).
* Includes aligned rubrics and scoring guidelines that provide guidance for interpreting student performance along the three dimensions to support teachers in (a) planning instruction and (b) providing ongoing feedback to students.
* Includes pre-, [**Formative**](http://ohiorc.org/adlit/InPerspective/Issue/2014-05/Article/feature.aspx), summative, and self-assessment measures that assess three-dimensional learning.
* Provides multiple opportunities for students to [demonstrate performance](https://www.teachingchannel.org/videos/evidence-student-learning-achieve) of practices connected with their understanding of disciplinary core ideas and crosscutting concepts and receive feedback.
 | * Elicits direct, observable evidence of the degree to which a student can independently demonstrate the major targeted grade level CCSS standards with appropriately complex text(s).
* Assesses student proficiency [using methods](http://stemteachingtools.org/brief/25) that are [unbiased and accessible](http://www.isbe.net/common_core/pls/level2/html/assess-unbiased.htm) to [all](http://www.wested.org/wp-content/files_mf/1391626953FormativeAssessment_report5.pdf) students.
* Includes [aligned rubrics and/or assessment guidelines](http://achievethecore.org/content/upload/AssessmentQualityChecklist_Version2_ELA_3-12.pdf) that provide [sufficient guidance](http://www.doe.k12.de.us/aab/English_Language_Arts/writing_rubrics.shtml) for interpreting student performance.
* Uses varied modes of assessment, including a range of pre, [formative](http://www.isbe.net/common_core/pdf/da-form-asmt-chart.pdf), summative, and [self-assessment](https://www.teachingchannel.org/videos/peer-teaching--2) measures.
* Indicate how students are accountable for independent reading based on student choice and interest to build stamina, confidence and motivation. *(May be more applicable across the year or several units).*
 |
| [**Assessments**](http://ngss.nsta.org/conducting-assessments.aspx)**:** | **Type** | **Science Performance Expectations and/or Science Literacy Standards** | **Science Dimensions** |
| P | [F](http://www.nextgenscience.org/classroom-sample-assessment-tasks) | S | SA | **DCI** | **SEP** | **CC** |
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**P = Pre-Assessment**  [**F = Formative**](http://www.nextgenscience.org/sites/default/files/SciMathTasks-FrontMatterDraft-Nov%202014.pdf)  **S = Summative SA = Self-Assessment**

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| **COMMENTS /** [**NOTES**](http://learningcenter.nsta.org/discuss/)**:** |
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