

# Florida Interim Assessment Item Bank and Test Platform

## Item Specifications

### Science and Social Studies Access Points



FLORIDA DEPARTMENT OF EDUCATION  
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# TABLE OF CONTENTS

<b>I. Introduction</b>	
A. Purpose of the Item Specifications . . . . .	1
B. Scope . . . . .	1
C. Standards Alignment. . . . .	1
1. Next Generation Sunshine State Standards . . . . .	1
<b>II. Guidelines for Item Development</b>	
A. Levels of Complexity . . . . .	2
B. Style Considerations . . . . .	2
1. Graphics. . . . .	2
2. Text . . . . .	3
3. Teacher Gathered Materials . . . . .	4
<b>III. Reader and Task Considerations</b>	
A. Communication Modes . . . . .	4
B. Response Options . . . . .	5
C. Universal Design . . . . .	5
<b>IV. Review Procedures for Florida Interim Assessment Item Bank Items</b>	
A. Review for Item Quality . . . . .	6
B. Review for Bias and Sensitivity . . . . .	6
<b>V. Guide to the Individual Benchmark Specifications</b>	
A. Benchmark Classification System for Science . . . . .	7
B. Benchmark Classification System for Social Studies . . . . .	8
<b>VI. Guide to the Access Point Specifications</b>	
A. NGSSS Science Access Point Course IDs . . . . .	9
B. NGSSS Social Studies Access Point Course IDs . . . . .	9
C. NGSSS Science Access Points by Grade Level . . . . .	10
D. NGSSS Science Access Points by Course . . . . .	15
E. NGSSS Social Studies Access Points by Standard . . . . .	20
<b>Appendices</b>	
Appendix A: Sample Item. . . . .	24
Appendix B: Explanation of Rubric. . . . .	29

# I. Introduction

The U.S. Department of Education awarded a Race to the Top grant to Florida in August 2010. An important component of this grant focused on the development of high-quality assessment items and balanced assessments for use by districts, schools, and teachers. The assessment items will be stored in the Florida Interim Assessment Item Bank and Test Platform, a statewide secure system which allows Florida educators to search the item bank, export test items, and generate customized high-quality assessments for computer-based delivery or paper-and-pencil delivery. The Item Bank and Test Platform allows Florida educators to determine what students know and are able to do relative to instruction on Florida’s Next Generation Sunshine State Standards and the Common Core State Standards.

## A. Purpose of the Item Specifications

The *Item Specifications* define the expectations for content, standards alignment, and format of assessment items for the Item Bank and Test Platform. The *Item Specifications* are intended for use by item writers and reviewers in the development of high-quality assessment items.

## B. Scope

The *Item Specifications* provide general and grade-specific guidelines for the development of all Access Points items available in the Florida Interim Assessment Item Bank.

## C. Standards Alignment

Items developed for the Florida Interim Assessment Item Bank and Test Platform will align to the Next Generation Sunshine State Standards for Science and Social Studies.

### 1. Next Generation Sunshine State Standards

In December 2008, the Florida State Board of Education adopted the Next Generation Sunshine State Standards (NGSSS) for Science and Social Studies. The Florida State Board of Education has made the standards available online at: <http://www.floridastandards.org/Standards/FLStandardSearch.aspx>.

# II. Guidelines for Item Development

The Interim Item Bank for Florida is based on the Next Generation Sunshine State Standards with three levels of Access Points (Participatory, Supported, and Independent). The three levels are scaffolded with increasing intensity of complexity (Participatory to Independent).

The Access Points were used to develop performance based items. Items are appropriate for students in terms of grade-level content, age and typical life experiences for the majority of this population. The performance items exhibit familiar objects and/or activities that mostly contain three response options for students to select from using the individual communication system they are most familiar with.

## A. Levels of Complexity

The Access Point levels of complexity (Participatory, Supported, and Independent) follow the intricacies of standards being assessed. At each level, context is clearly defined by the complexity as defined within the standard. For example, standards being assessed at the participatory level typically have the student recognize, associate, demonstrate, locate, or sequence information within a familiar context. At the independent level, standards typically have students examine, illustrate, locate, construct, examine, or describe information within a less familiar context. The levels of complexity for each item reflect the format of the response options by providing three options.

- **Participatory (Pa) Level Access Points**—Response options will primarily be picture cards and word/picture cards. For grades K–5, both incorrect options will not relate to the item stimulus (cat, pencil, cup—cat being correct response). For grades 6–12, the incorrect responses will generally be within the same larger category as the item stimulus (cat, dog, horse—cat being correct).
- **Supported (Su) Level Access Points**—Response options will primarily be picture cards, word cards, word/picture cards, and sentence/picture strips. At least one of the two incorrect options will relate to the item stimulus.
- **Independent (In) Level Access Points**—Response options will primarily be word cards, word/picture cards, and sentence/picture strips. Both of the incorrect options will relate to the item stimulus.

## B. Style Considerations

### 1. Graphics

- Provide picture cues at Participatory level to allow students who function at the early-symbolic level to access the items.
  - Graphics may be excluded when the use of pictures complicates the item for other students. If at all possible, items should be written that can be depicted with a picture.
- Items may be rejected if a concept cannot be depicted in pictures or if a picture adds confusion to the test item.
- Item graphics should be available as a manipulative as much as possible, especially at the Participatory level.
  - When considering manipulatives, real objects must be able to be substituted for the graphic (i.e., no miniatures or replicas).
  - If manipulatives are not appropriate, the graphic labels in the Materials column must be detailed enough to give a clear description of the graphic.
- Graphics should be consistent within a stimulus set or within a response set. Line art, both for stimulus and/or item responses, will be black and white drawings using a heavy weight line (2–2.5 point). Grayscale will be used only if necessary. For example, in a glass or pitcher showing a liquid, the liquid will be shaded. Color graphics are only used if noted within the standard.

- Graphics will concentrate on the central idea of the standard and to eliminate any extraneous information.
- Graphics, whenever possible, should be of pictures of objects that can be easily replaced with the real objects or manipulatives. These objects need to be easily accessible in a school setting.
- Graphics of objects that may be replaced by the real objects need to be small enough to fit on a desk space and to remain stable (not rolling around).
- Graphics should use the entire space provided on a card or strip to be as large as possible.
- All default emotions of characters will be happy unless the item or stimulus specifies otherwise.
- Graphics of objects will be as “real” as possible and will not be interpretive.
  - At grades K through 5 it may be appropriate for graphics to be simple line drawings (sun, clouds, raindrops); and starting at grade 6, the graphics should be more realistic.
- Graphics should provide context/detail when applicable.
  - For example, if an ear is the target response, a whole head will be drawn with an arrow pointing to the ear. If a roof is the target response, then the house should be drawn with an arrow pointing to the roof.
- All charts, graphs, and words or numbers will be a minimum of 18 point font.
- All tables, charts, and maps must have titles and keys as appropriate. All keys should be placed so that they stand out.

## 2. *Text*

- To determine whether a word is appropriate to use in an item, a variety of sources may be used: Dolch Basic Sight Word List, Revised Dolch List, EDL Core Vocabularies in Reading, Mathematics, Science, and Social Studies. We will rely on the expert writers and reviewers to help make the word choices appropriate for the student population and make the items appropriate to what a student knows and is able to do.
- All items will be written as simply as possible, avoiding wordiness. Extraneous information should be avoided.
- Items should clearly address the concept and/or skill described in the Access Point for each level of complexity within an item set.
- Familiar vocabulary will be used at grades K through 5 and at the Participatory level at all grades that are commonly used in many situations. Both familiar and unfamiliar vocabulary are used at grades 6 through 12. It is important to keep in mind that it is the concept that is being assessed and not the vocabulary in most instances.

- Items will be developed with real-world contexts in mind. Items should involve situations or contexts that can be expected to be familiar to most students and that are age-appropriate. Items will be kept at as concrete a level as possible.
- Where not otherwise specified in the standard being assessed, numbers and other elements of items should be kept as simple as possible.

### 3. *Teacher Gathered Materials*

- When teacher-gathered materials are gathered to assess the access point, a list of materials should be provided at the item level.
- Items may presume the use of some readily available classroom materials, such as rulers. However, most items should include all necessary materials (e.g., maps), and other manipulatives (e.g., picture cards) will be provided as graphics on regular paper.
- Items will refrain from referring to the color of objects unless indicated within the standard.

## III. Reader and Task Considerations

### A. Communication Modes

At all Access Point levels of complexity (Participatory, Supported and Independent), students may respond with the mode of communication that they most commonly use, such as yes/no cards, picture cards, word cards, sentence strips, verbal or written responses, eye gaze, assistive technology, and/or signing. Typically, response options will be provided in a three-selection format from which the student can choose.

## B. Response Options

- In most cases, items should use words in the questions that have a sign and do not require the administrator to finger spell for students who are deaf or hearing impaired.
- Where students are asked to select a single choice from a set of response options, there should be at most three options provided. On occasion students may be given up to six options and asked to address each one, for example, an item that asks a student to sort each option in certain categories (e.g., show different shapes and ask student to sort the objects that are large and small).
- The item question and response options need to be aligned in how text is being used to avoid cueing. For example, if an item says, “Show me/ tell me which picture shows a school” and the correct response is labeled “School” the answer would be given away to the student.

## C. Universal Design

The principles of Universal Design should be incorporated in the development of the performance items to support the student population with unique educational needs, varying cultural experiences, diverse linguistic backgrounds, and numerous disability challenges. We typically present three options to students when multiple response options are required.

- Item-writing guidelines typically followed by assessment developers:
  - Items are aligned to the particular standard and appropriate level of difficulty.
  - Items are clear, concise, and easy to read.
  - Items have one and only one answer for multiple-choice.
  - Irrelevant clues to the correct answer are avoided.
  - Most items are positively worded.
  - Response options have similar length.
  - Avoid complicated and/or abstract art.
  - All response options are similar in grammatical structure and form.
  - Item context avoids any cultural, racial, religious, ethnical, or gender bias.



## IV. Review Procedures for Florida Interim Assessment Item Bank Items

Prior to being included in the Florida Interim Assessment Item Bank, items must pass several levels of review as part of the item development process.

### A. Review for Item Quality

Performance based items developed for the Florida Interim Assessment Item Bank are reviewed by Florida educators, the FDOE, and the Item Bank contractors to ensure the quality of the items, including grade-level appropriateness, standards alignment, accuracy, and overall item quality.

### B. Review for Bias and Sensitivity

Items are reviewed by groups of Florida educators generally representative of Florida’s geographic regions and culturally diverse population. Items are reviewed for the following kinds of bias: gender, racial, ethnic, linguistic, religious, geographic, and socioeconomic. Item reviews also include consideration of issues related to individuals with disabilities.

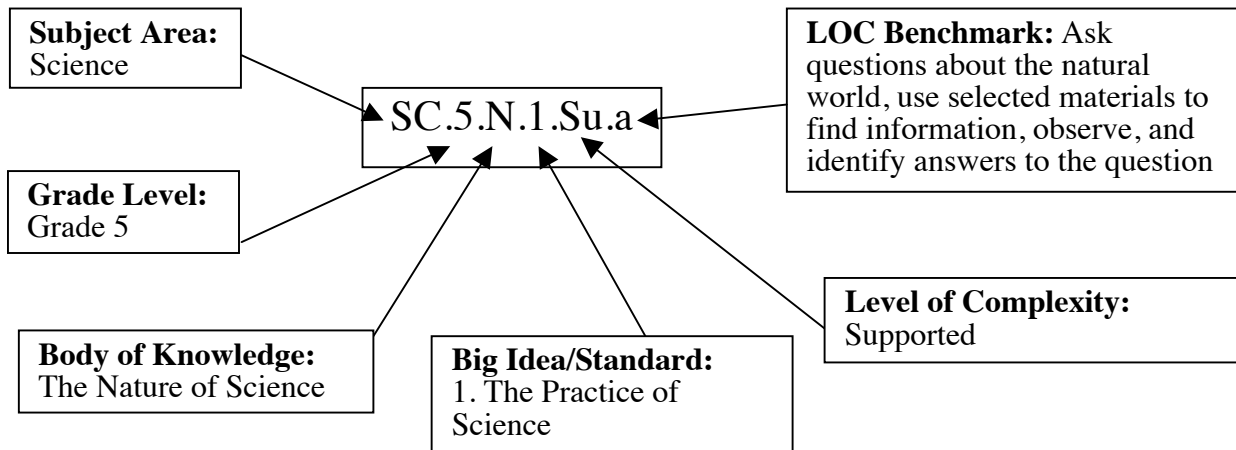
This review is to ensure that the primary purpose of assessing student achievement is not undermined by inadvertently including in the item bank any material that students, parents, or other stakeholders may deem inappropriate. Reviewers are asked to consider the variety of cultural, regional, philosophical, political, and religious backgrounds throughout Florida and to determine whether the subject matter will be acceptable to Florida students, their parents, and other members of Florida communities.

## V. Guide to the Individual Benchmark Specifications

### A. Benchmark Classification System for Science

Each benchmark in the NGSSS for science is labeled with a system of numbers and letters.

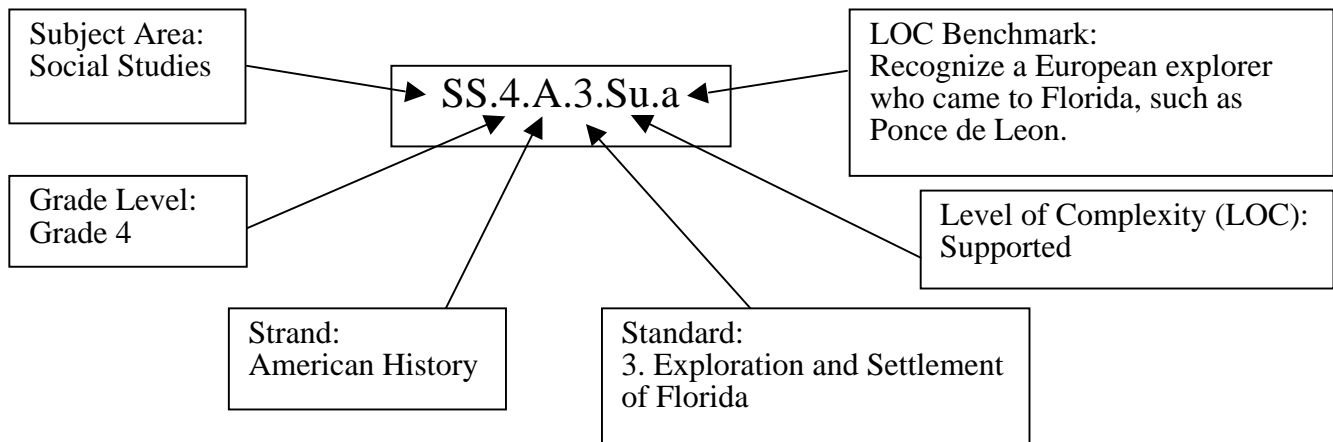
- The two letters in the *first position* of the code identify the **Subject Area**.
- The number(s) in the *second position* represent the **Grade Level** to which the benchmark belongs.
- The letter in the *third position* represents the **Body of Knowledge** to which the benchmark belongs (e.g., N represents the Nature of Science).
- The number in the *fourth position* represents the **Big Idea/Standard**.
- The letters in the *fifth position* represent the **Level of Complexity (LOC)**.
- The letter in the *last position* represents the **LOC Benchmark**.



## B. Benchmark Classification System for Social Studies

Each benchmark in the NGSSS for Social Studies is labeled with a system of numbers and letters.

- The two letters in the *first position* of the code identify the **Subject Area**.
- The number(s) in the *second position* represent the **Grade Level** to which the benchmark belongs.
- The letter in the *third position* represents the **Strand** to which the benchmark belongs (e.g., *A* represents American History, *G* represents Geography, *E* represents Economics, *W* represents World History, *C* represents Civics and Government, and *H* represents Humanities).
- The number in the *fourth position* represents the **Standard**.
- The letters in the *fifth position* represent the **Level of Complexity (LOC)**.
- The letter in the *last position* represents the **LOC Benchmark**.



## VI. Guide to Access Point Specifications

### A. NGSSS Science Access Points Course IDs

Grade Level	Course Name	Course Number
Kindergarten	Science	7720015
Grade 1	Science	7720020
Grade 2	Science	7720030
Grade 3	Science	7720040
Grade 4	Science	7720050
Grade 5	Science	7720060
Grades 6–8	M/J Comprehensive Science 1	7820015
Grades 6–8	M/J Comprehensive Science 2	7820016
Grades 6–8	M/J Comprehensive Science 3	7820017
Grades 9–12	Chemistry	7920011
Grades 9–12	Biology	7920015
Grades 9–12	Earth/Space Science	7920020
Grades 9–12	Integrated Science	7920025

### B. NGSSS Social Studies Access Point Course IDs

Grade Level	Course Name	Course ID
Kindergarten	Social Studies	7721011
Grade 1	Social Studies	7721012
Grade 2	Social Studies	7721013
Grade 3	Social Studies	7721014
Grade 4	Social Studies	7721015
Grade 5	Social Studies	7721016
Grades 6–8	M/J World History	7821022
Grades 6–8	M/J Civics	7821021
Grades 6–8	M/J United States History	7821025
Grades 6–8	M/J Civics and Career Planning	7821023
Grades 6–8	M/J United States History and Career Planning	7821026
Grades 9–12	United States History	7921025
Grades 9–12	United States Government	7921015
Grades 9–12	Economics	7921020

### C. NGSSS Science Access Points by Grade Level

NGSSS Standard	Access Points by Grade Level								
Big Idea/Standard	KG	1	2	3	4	5	6	7	8
<p><b>Big Idea/Standard 1: The Practice of Science</b></p> <p>A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.</p> <p>B: The processes of science frequently do not correspond to the traditional portrayal of “the scientific method.”</p> <p>C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.</p> <p>D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.</p>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<p><b>Big Idea/Standard 3: The Role of Theories, Laws, Hypotheses, and Models</b></p> <p>The terms that describe examples of scientific knowledge, for example; “theory,” “law,” “hypothesis,” and “model” have very specific meanings and functions within science.</p>	No	No	No	Yes	Yes	No	Yes	Yes	Yes

NGSSS Standard	Access Points by Grade Level								
Big Idea/Standard	KG	1	2	3	4	5	6	7	8
<p><b>Big Idea/Standard 4: Science and Society</b></p> <p>As tomorrow’s citizens, students should be able to identify issues about which society could provide input, formulate scientifically investigable questions about those issues, construct investigations of their questions, collect and evaluate data from their investigations, and develop scientific recommendations based upon their findings.</p>	No	No	No	No	No	No	No	No	Yes
<p><b>Big Idea/Standard 5: Earth in Space and Time</b></p> <p>Humans continue to explore Earth’s place in space. Gravity and energy influence the formation of galaxies, including our Milky Way Galaxy, stars, the Solar System, and Earth. Humankind’s need to explore continues to lead to the development of knowledge and understanding of our Solar System.</p>	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes
<p><b>Big Idea/Standard 6: Earth Structures</b></p> <p>Humans continue to explore the composition and structure of the surface of Earth. External sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth’s water and natural resources.</p>	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
<p><b>Big Idea/Standard 7: Earth Systems and Patterns</b></p> <p>Humans continue to explore the interactions among water, air, and land. Air and water are in constant motion that results in changing conditions that can be observed over time.</p>	No	No	Yes	No	No	Yes	Yes	No	No

NGSSS Standard	Access Points by Grade Level								
Big Idea/Standard	KG	1	2	3	4	5	6	7	8
<p><b>Big Idea/Standard 8: Properties of Matter</b></p> <p>A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.</p> <p>B. Objects and substances can be classified by their physical and chemical properties.</p> <p>Mass is the amount of matter (or “stuff”) in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.</p> <p>The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of “weight” is recommended for use to stand for both mass and weight in grades K–5. By grades 6–8, students are expected to understand the distinction between mass and weight, and use them appropriately.</p>	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
<p><b>Big Idea/Standard 9: Changes in Matter</b></p> <p>A. Matter can undergo a variety of changes.</p> <p>B. Matter can be changed physically or chemically.</p>	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
<p><b>Big Idea/Standard 10: Forms of Energy</b></p> <p>A. Energy is involved in all physical processes and is a unifying concept in many areas of science.</p> <p>B. Energy exists in many forms and has the ability to do work or cause a change.</p>	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No

NGSSS Standard	Access Points by Grade Level								
Big Idea/Standard	KG	1	2	3	4	5	6	7	8
<p><b>Big Idea/Standard 11: Energy Transfer and Transformations</b></p> <p>A. Waves involve a transfer of energy without a transfer of matter.</p> <p>B. Water and sound waves transfer energy through a material.</p> <p>C. Light waves can travel through a vacuum and through matter.</p>	No	No	No	Yes	Yes	Yes	Yes	Yes	No
<p><b>Big Idea/Standard 12: Motion</b></p> <p>A. Motion is a key characteristic of all matter that can be observed, described, and measured.</p> <p>B. The motion of objects can be changed by forces.</p>	Yes	Yes	No	No	Yes	No	Yes	No	No
<p><b>Big Idea/Standard 13: Forces and Changes in Motion</b></p> <p>A. It takes energy to change the motion of objects.</p> <p>B. Energy change is understood in terms of forces—pushes or pulls.</p> <p>C. Some forces act through physical contact, while others act at a distance.</p>	Yes	Yes	Yes	No	No	Yes	Yes	No	No
<p><b>Big Idea/Standard 14: Organization and Development of Living Organisms</b></p> <p>A. All plants and animals, including humans, are alike in some ways and different in others.</p> <p>B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.</p> <p>C. Humans can better understand the natural world through careful observation.</p>	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No



NGSSS Standard	Access Points by Grade Level								
Big Idea/Standard	KG	1	2	3	4	5	6	7	8
<p><b>Big Idea/Standard 15: Diversity and Evolution of Living Organisms</b></p> <p>A. Earth is home to a great diversity of living things, but changes in the environment can affect their survival.</p> <p>B. Individuals of the same kind often differ in their characteristics and sometimes the differences give individuals an advantage in surviving and reproducing.</p>	No	No	No	Yes	No	Yes	Yes	Yes	No
<p><b>Big Idea/Standard 16: Heredity and Reproduction</b></p> <p>A. Offspring of plants and animals are similar to, but not exactly like, their parents or each other.</p> <p>B. Life cycles vary among organisms, but reproduction is a major stage in the life cycle of all organisms.</p>	No	Yes	Yes	No	Yes	No	No	Yes	No
<p><b>Big Idea/Standard 17: Interdependence</b></p> <p>A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.</p> <p>B. Both human activities and natural events can have major impacts on the environment.</p> <p>C. Energy flows from the sun through producers to consumers.</p>	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
<p><b>Big Idea/Standard 18: Matter and Energy Transformations</b></p> <p>A. Living things all share basic needs for life.</p> <p>B. Living organisms acquire the energy they need for life processes through various metabolic pathways (photosynthesis and cellular respiration).</p> <p>C. Matter and energy are recycled through cycles such as the carbon cycle.</p>	No	No	No	No	No	No	No	No	Yes

## D. NGSSS Science Access Points by Course

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Nature of Science</b>	<b>Chemistry, Earth/ Space Science, and Integrated Science</b>
<p><b>Standard 1: The Practice of Science</b></p> <p>A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.</p> <p>B: The processes of science frequently do not correspond to the traditional portrayal of “the scientific method.”</p> <p>C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.</p> <p>D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.</p>	<b>Yes</b>
<p><b>Standard 2: The Characteristics of Scientific Knowledge</b></p> <p>A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.</p> <p>B: Scientific knowledge is durable and robust, but open to change.</p> <p>C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.</p>	<b>Yes</b>
<p><b>Standard 3: The Role of Theories, Laws, Hypotheses, and Models</b></p> <p>The terms that describe examples of scientific knowledge, for example: “theory,” “law,” “hypothesis” and “model” have very specific meanings and functions within science.</p>	<b>Yes</b>
<p><b>Standard 4: Science and Society</b></p> <p>As tomorrow’s citizens, students should be able to identify issues about which society could provide input, formulate scientifically investigable questions about those issues, construct investigations of their questions, collect and evaluate data from their investigations, and develop scientific recommendations based upon their findings.</p>	<b>Yes</b>

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Earth and Space Science</b>	<b>Biology, Integrated Science, Chemistry, and Earth/Space Science</b>
<p><b>Standard 5: Earth in Space and Time</b></p> <p>The origin and eventual fate of the Universe still remains one of the greatest questions in science. Gravity and energy influence the development and life cycles of galaxies, including our own Milky Way Galaxy, stars, the planetary systems, Earth, and residual material left from the formation of the Solar System. Humankind’s need to explore continues to lead to the development of knowledge and understanding of the nature of the Universe.</p>	<b>Yes</b>
<p><b>Standard 6: Earth Structures</b></p> <p>The scientific theory of plate tectonics provides the framework for much of modern geology. Over geologic time, internal and external sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth’s internal and external energy and material resources.</p>	<b>Yes</b>
<p><b>Standard 7: Earth Systems and Patterns</b></p> <p>The scientific theory of the evolution of Earth states that changes in our planet are driven by the flow of energy and the cycling of matter through dynamic interactions among the atmosphere, hydrosphere, cryosphere, geosphere, and biosphere, and the resources used to sustain human civilization on Earth.</p>	<b>Yes</b>

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Physical Science</b>	<b>Biology, Integrated Science, Chemistry, and Earth/Space Science Access Integrated Science</b>
<p><b>Standard 8: Matter</b></p> <p>A. A working definition of matter is that it takes up space, has mass, and has measurable properties. Matter is comprised of atomic, subatomic, and elementary particles.</p> <p>B. Electrons are key to defining chemical and some physical properties, reactivity, and molecular structures. Repeating (periodic) patterns of physical and chemical properties occur among elements that define groups of elements with similar properties. The periodic table displays the repeating patterns, which are related to the atom’s outermost electrons. Atoms bond with each other to form compounds.</p> <p>C. In a chemical reaction, one or more reactants are transformed into one or more new products. Many factors shape the nature of products and the rates of reaction.</p> <p>D. Carbon-based compounds are building-blocks of known life forms on earth and numerous useful natural and synthetic products.</p>	<b>Yes</b>
<p><b>Standard 10: Energy</b></p> <p>A. Energy is involved in all physical and chemical processes. It is conserved, and can be transformed from one form to another and into work. At the atomic and nuclear levels energy is not continuous but exists in discrete amounts. Energy and mass are related through Einstein’s equation <math>E=mc^2</math>.</p> <p>B. The properties of atomic nuclei are responsible for energy-related phenomena such as radioactivity, fission and fusion.</p> <p>C. Changes in entropy and energy that accompany chemical reactions influence reaction paths. Chemical reactions result in the release or absorption of energy.</p> <p>D. The theory of electromagnetism explains that electricity and magnetism are closely related. Electric charges are the source of electric fields. Moving charges generate magnetic fields.</p> <p>E. Waves are the propagation of a disturbance. They transport energy and momentum but do not transport matter.</p>	<b>Yes</b>

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Physical Science</b>	<b>Biology, Integrated Science, Chemistry, and Earth/Space Science Access Integrated Science</b>
<p><b>Standard 12: Motion</b></p> <p>A. Motion can be measured and described qualitatively and quantitatively. Net forces create a change in motion. When objects travel at speeds comparable to the speed of light, Einstein’s special theory of relativity applies.</p> <p>B. Momentum is conserved under well-defined conditions. A change in momentum occurs when a net force is applied to an object over a time interval.</p> <p>C. The Law of Universal Gravitation states that gravitational forces act on all objects irrespective of their size and position.</p> <p>D. Gases consist of great numbers of molecules moving in all directions. The behavior of gases can be modeled by the kinetic molecular theory.</p> <p>E. Chemical reaction rates change with conditions under which they occur. Chemical equilibrium is a dynamic state in which forward and reverse processes occur at the same rates.</p>	<b>Yes</b>

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Life Science</b>	<b>Biology, Integrated Science, Chemistry, and Earth/Space Science</b>
<p><b>Standard 14: Organization and Development of Living Organisms</b></p> <p>A. Cells have characteristic structures and functions that make them distinctive.</p> <p>B. Processes in a cell can be classified broadly as growth, maintenance, reproduction, and homeostasis.</p> <p>C. Life can be organized in a functional and structural hierarchy ranging from cells to the biosphere.</p> <p>D. Most multicellular organisms are composed of organ systems whose structures reflect their particular function.</p>	<b>Yes</b>

NGSSS Standard	Access Points by Course
<b>Body of Knowledge: Life Science</b>	<b>Biology, Integrated Science, Chemistry, and Earth/Space Science</b>
<p><b>Standard 15: Diversity and Evolution of Living Organisms</b></p> <p>A. The scientific theory of evolution is the fundamental concept underlying all of biology.</p> <p>B. The scientific theory of evolution is supported by multiple forms of scientific evidence.</p> <p>C. Organisms are classified based on their evolutionary history.</p> <p>D. Natural selection is a primary mechanism leading to evolutionary change.</p>	<b>Yes</b>
<p><b>Standard 16: Heredity and Reproduction</b></p> <p>A. DNA stores and transmits genetic information. Genes are sets of instructions encoded in the structure of DNA.</p> <p>B. Genetic information is passed from generation to generation by DNA in all organisms and accounts for similarities in related individuals.</p> <p>C. Manipulation of DNA in organisms has led to commercial production of biological molecules on a large scale and genetically modified organisms.</p> <p>D. Reproduction is characteristic of living things and is essential for the survival of species.</p>	<b>Yes</b>
<p><b>Standard 17: Interdependence</b></p> <p>A. The distribution and abundance of organisms is determined by the interactions between organisms, and between organisms and the non-living environment.</p> <p>B. Energy and nutrients move within and between biotic and abiotic components of ecosystems via physical, chemical and biological processes.</p> <p>C. Human activities and natural events can have profound effects on populations, biodiversity and ecosystem processes.</p>	<b>Yes</b>
<p><b>Standard 18: Matter and Energy Transformations</b></p> <p>A. All living things are composed of four basic categories of macromolecules and share the same basic needs for life.</p> <p>B. Living organisms acquire the energy they need for life processes through various metabolic pathways (primarily photosynthesis and cellular respiration).</p> <p>C. Chemical reactions in living things follow basic rules of chemistry and are usually regulated by enzymes.</p> <p>D. The unique chemical properties of carbon and water make life on Earth possible.</p>	<b>Yes</b>

## E. NGSSS Social Studies Access Points by Standard

The content in the social studies strands is organized by standards in grades K–12. The standards describe the broad understandings or concepts that are required in each strand. Benchmarks were developed to address standards selected for each grade level. Access Points for students with significant cognitive disabilities were then created to align with the grade-level benchmarks and standards.

### *Grades K through 5*

For each of the grades K through 8, the state’s social studies standards include four strands: American History, Geography, Economics, and Civics and Government.

### *Grades 6 through 12*

For each of the grades 9 through 12, the state’s social studies standards include five strands: American History, Geography, Economics, Civics and Government, and Humanities.

2012–2013 Common Item Blueprint Social Studies Grades K–5							
Strand	Standard	K	1	2	3	4	5
<b>American History</b>	Historical Inquiry and Analysis	2	2	2	3	2	2
	Historical Knowledge	5	5	8			
	Chronological Thinking	2	2	1		1	
	Pre-Columbian North America (Florida, Grade 4; United States, Grade 5)					1	3
	Exploration and Settlement of North America (Florida, Grade 4; United States, Grade 5)					10	3
	Colonization of North America						6
	American Revolution and Birth of a New Nation						10
	Growth and Westward Expansion (Florida, Grade 4; United States, Grade 5)					2	9
	Crisis of the Union: Civil War and Reconstruction in Florida					2	
	Industrialization and Emergence of Modern Florida					4	
	Roaring 20s, the Great Depression, and World War II in Florida					3	
	Contemporary Florida into the 21st Century					4	

2012–2013 Common Item Blueprint Social Studies Grades K–5							
Strand	Standard	K	1	2	3	4	5
<b>Geography</b>	The World in Spatial Terms	4	6	4	6	4	6
	Places and Regions	2			6		
	Physical Systems	3			2		
	Human Systems				4		
	Environment and Society						1
	Uses of Geography						2
<b>Economics</b>	Beginning Economics	4	6	4	4	2	
	Market Economy						3
	The International Economy						1
<b>Civics and Government</b>	Foundations of Government, Law, and the American Political System	2	3	2	3	1	6
	Civic and Political Participation	3	3	5	1	3	5
	Structure and Functions of Government		2	2	4	2	6
	<b>Total Benchmarks</b>	<b>27</b>	<b>29</b>	<b>28</b>	<b>33</b>	<b>41</b>	<b>64</b>

2012–2013 Common Item Blueprint Social Studies Grades 6–8 and 9–12					
Strand	Standard	6	7	8	9–12
<b>American History</b>	Historical Inquiry and Analysis			7	7
	Colonization of North America			7	
	American Revolution and Birth of a New Nation			16	
	Growth and Westward Expansion			18	
	Civil War and Reconstruction			8	7
	Industrial Revolution				13
	U.S. in World Affairs through World War I				11
	Roaring 20s and Great Depression				12
	World War II				15
	Rise of the U.S. as a World Leader and Changes in American Life				17



2012–2013 Common Item Blueprint Social Studies Grades 6–8 and 9–12

Strand	Standard	6	7	8	9–12
<b>Geography</b>	Maps and Geographic Tools	7	3	2	4
	Physical and Cultural Characteristics of Places	7	4	3	5
	Earth’s Ecosystems and Populations	2	1	2	5
	Migration of Human Populations	4	2	6	9
	Human Impact on Environment	3	1	2	6
	Applications of Geography	2	1	2	5
<b>Economics</b>	Market Economy	3	6	1	16
	National Economy	1	5	3	12
	U.S. and the International Economy	4	4	1	6
<b>Civics and Government</b>	Origins and Purposes of Government, Law, and the American Political System	2	9		5
	Citizens’ Roles, Rights, and Responsibilities	1	14	6	15
	Principles, Functions, and Organization of Government		14	1	4
	Contemporary Issues in World Affairs and U.S. Foreign Policy		3		

2012–2013 Common Item Blueprint Social Studies Grades 6–8 and 9–12

Strand	Standard	6	7	8	9–12
<b>World History</b>	Historical Inquiry and Analysis	6			6
	Emergence of Early Civilizations (Nile, Tigris-Euphrates, Indus and Yellow Rivers, Meso and South American)	10			
	Classical Civilizations (Phoenicia, Greece, Rome, Axum)	18			
	Classical Asian Civilizations (China, India)	12			
	Medieval Civilizations (Byzantine Empire, Western Europe, Japan)				22
	Islamic, Meso and South American, and Sub-Saharan African Civilizations				19
	Renaissance, Reformation, Scientific Revolution, and Age of Exploration				15
	The Enlightenment and Its Impact				7
	Western and Non-Western Nationalism, Industrialization, and Imperialism				7
	Great War Period and Its Impact on Balance of Power				11
	Post World War II and Cold War				10
	Trends beginning in the 20th Century				7
	<b>Humanities</b>	Historical, Social, and Cultural Contexts of the Arts			
Responding Critically and Aesthetically to Works of Art					5
Influences of Transportation, Trade, Communication, Science, and Technology on Culture					3
	<b>Total Benchmarks</b>	82	67	85	309

## Appendix A: Sample Item

### A. Sample Item Walk-Through: General

The following sample item will be used to walk-through all the components and administration of an item.

Materials	Access Point	Teacher will	Student will	Score
Item 1.	No response. Student actively refuses or does not engage at any point during the Participatory Level.			0
Word/picture cards: ice cubes paper clips notebooks	<b>Participatory:</b> Distinguish between water as a liquid and ice as a solid.	<i>Here are three pictures with words.</i> Read the word/picture cards to the student. <i>Show me/tell me which picture shows solid water.</i>	Indicate ice cubes	3 2 1
Stimulus picture cards: Water Sentence/picture strips: Stir it in a bowl. Put it in a freezer. Heat it in an oven.	<b>Supported:</b> Match different states of water (liquid and solid) to change in temperature.	<i>Here is a picture.</i> <i>Here are three sentences.</i> Read the sentence/picture strips to the student. <i>Show me/tell me a way to change liquid water to solid water.</i>	Indicate “Put it in a freezer.”	6
Sentence strips: Rain water flows down the street. Water vapor evaporates from the oceans. Snowflakes fall from the sky.	<b>Independent:</b> Label the state of water in each stage of the water cycle.	<i>Here are three sentences. Each sentence describes a part of the water cycle.</i> Read the sentence strips to the student. <i>Show me/tell me which sentence describes water as a gas.</i>	Indicate “Water vapor evaporates from the oceans.”	9

## 1. Materials

<b>Materials</b> —This column lists the materials needed to administer the item.	
<b>Materials</b>	
Word/picture cards: ice cubes paper clips notebooks  Stimulus picture cards: Water Sentence/picture strips: Stir it in a bowl. Put it in a freezer. Heat it in an oven.  Sentence strips: Rain water flows down the street. Water vapor evaporates from the oceans. Snowflakes fall from the sky.	<ul style="list-style-type: none"><li>• Materials are listed in the order that they appear in the item. Follow the directions for laying out the item and place the cards and/or strips in the same order as they appear in the <b>Materials</b> column.</li><li>• Any materials teacher’s gather in consideration for an item will be listed first in the <b>Materials</b> column of the item and on the first page of the content area. Please also refer to the List of Cards and/or Strips and Materials by Item.</li><li>• Teacher-gathered real world objects and/or manipulatives may also be used to support the student’s individual education plan.</li></ul>

## 2. Access Points

<i>Access Points</i> —This column shows the Access Point that the item is assessing	
Access Points	
<p><b>Participatory:</b> Distinguish between water as a liquid and ice as a solid.</p> <p><b>Supported:</b> Match different states of water (liquid and solid) to change in temperature.</p> <p><b>Independent:</b> Label the state of water in each stage of the water cycle.</p>	<ul style="list-style-type: none"><li>• Access Points are identified for each level of complexity (Participatory, Supported, and Independent). Please note that not all standards cover all three levels of complexity. For these standards, one or more complexity levels may not be assessed.</li></ul>

### 3. Teacher Will

<b>Teacher will</b> —This column outlines the administration of the item.	
Teacher will	
<p><i>Here are three pictures with words.</i> Read the word/picture cards to the student.</p> <p><i>Show me/tell me which picture shows solid water.</i></p> <p><i>Here is a picture.</i> <i>Here are three sentences.</i> Read the sentence/picture strips to the student.</p> <p><i>Show me/tell me a way to change liquid water to solid water.</i></p> <p><i>Here are three sentences. Each sentence describes a part of the water cycle.</i> Read the sentence strips to the student.</p> <p><i>Show me/tell me which sentence describes water as a gas.</i></p>	<ul style="list-style-type: none"> <li>• When the item script says, “<i>Here is a picture/Here are some pictures with words ...</i>” direct the student’s attention to the cards, e.g., point to the cards, run your hand along the bottom of the cards, or hand-over-hand along the cards.</li> <li>• The directions in the <b>Teacher will</b> column will ask you to place Cards and/or strips on the work surface. Cards and strips must be placed on the work surface in the order listed in the <b>Materials</b> column.</li> <li>• Generally, the directions instruct the teacher to read word/picture cards, word cards, number cards, equation strips, sentence/picture strips, or sentence strips to the student.</li> <li>• Even if the student can read the card independently, you must read aloud the card/strip unless the directions indicate that the card/strip should not be read aloud.</li> <li>• It is important that the teacher reads the item script (presented in italics) <i>exactly</i> as it is written. The only exception is the “show me/tell me” portion of the item script. This part of the item script should be replaced for each student according to the student’s mode of response. Following are some examples of replacements for “show me/tell me.” Note that this is not an all-inclusive list but a representation of substitutions. In determining a substitution, consider language that is familiar to the student, used in daily instruction, and reflective of the student’s response mode.             <ul style="list-style-type: none"> <li>▪ <b>Show me</b> the card...</li> <li>▪ <b>Tell me</b> the card...</li> <li>▪ <b>Sign to</b> me the card...</li> <li>▪ <b>Point to</b> the card...</li> <li>▪ <b>Touch</b> the card...</li> <li>▪ <b>Look at</b> the card...</li> <li>▪ <b>I will move my hand over each card; tell me when to stop at</b> the card...</li> </ul> </li> </ul>

#### 4. Student Will

<b>Student will</b> —This column outlines the expected student response.	
<b>Student will</b>	
Indicate ice cubes Indicate “Put it in a freezer.” Indicate “Water vapor evaporates from the oceans.”	<ul style="list-style-type: none"><li>• This is the correct answer required from the student at each level.</li><li>• The broad term “indicate” was specifically used to accommodate the various response modes for each student. The way a response is indicated may be different for each student and will correspond to the substitution provided for the response mode in the “show me/tell me” portion of the item script. However, it is acceptable if, for example, the assessment administrator substitutes, “<b>Sign to me</b> the card,” but the student touches a card in response rather than signing. This touch should be considered the student’s response and should be counted as correct if the correct card was touched or incorrect if an incorrect card was touched.<ul style="list-style-type: none"><li>▪ <b>Show me</b> the card... A correct response would be to show (e.g., by picking up, pointing at) the correct card.</li><li>▪ <b>Tell me</b> the card... A correct response would be to tell (e.g., “it’s the first one”) which one is the correct card.</li><li>▪ <b>Sign to me</b> the card... A correct response would be for the student to sign to indicate the correct card.</li><li>▪ <b>Point to</b> the card... A correct response would be to point at the correct card.</li><li>▪ <b>Touch</b> the card... A correct response would be to touch the correct card.</li><li>▪ <b>Look at</b> the card... A correct response would be to eye gaze at the correct card.</li><li>▪ <b>I will move my hand over each card; tell me when to stop at</b> the card... A correct response would be to indicate “stop” when the assessment administrator’s hand is over the correct card.</li><li>▪ <b>I will move my hand over each card; hit the switch at</b> the card... A correct response would be to hit a Big Mac switch when the assessment administrator’s hand is over the correct card.</li></ul></li></ul>

## Appendix B: Explanation of Rubric

### A. Explanation of rubric

Within each item set, each of the three Access Points is addressed. Each student starts at the Participatory level. A student who completes the Participatory level item accurately without assistance moves on to the Supported level item. In this way, the student moves up through the Access Points as long as he or she is able to respond accurately and independently. Scaffolding occurs only at the Participatory level item. Scaffolding occurs for a student who is unable to complete the Participatory level item accurately and independently. The student will be presented the item again with one distractor removed; if the student is able to accurately respond, he or she will be scored at two points. If the student is still unable to accurately respond, the item is presented again with another distractor removed (leaving only the correct answer), and the student is asked to actively engage with the correct answer. At any point within the Participatory level item, if the student will not engage or actively refuses, the student will score zero.

The student receives a final score for the item set based on the highest level at which he or she answered correctly. For example, if the student is unable to complete the item at the Supported level, he or she retains the three-point score from the Participatory level. However, if he or she is able to complete the Supported item, the teacher will next administer the Independent level item. If the student is unable to complete the Independent item accurately, a score of six points is awarded. However, if the student completes the Independent item accurately, the teacher will record a score of nine points.



1. Sample Access Point Rubric Chart

	Participatory Level Scaffolding				Supported Level	Independent Level
	3	2	1	6		
0 No response. Student actively refuses or does not engage at any point during the Participatory Level.	Student responds correctly at Participatory Level.  • Present student with prompt as written. • If student responds correctly, move to the Supported Level. • If student responds incorrectly, move to the 2 point scaffolding.	Student responds correctly after the removal of one distractor at the Participatory Level.  • Remove the incorrect response indicated by the student, repeat the Participatory Level prompt. • If student responds correctly, score the student at 2 points. • If student responds incorrectly, move to the 1 point scaffolding.	Student responds correctly after the removal of two distractors at the Participatory Level.  • Remove the incorrect response indicated by the student, repeat the Participatory Level prompt and lead the student to the correct response. • If student responds correctly, score the student at 1 point. • If the student actively refuses or does not engage at any point during the Participatory Level, score the student at 0 points.	Student responds correctly at Supported Level.  • Present student with prompt as written. • If student responds correctly, move to the Independent Level. • If student responds incorrectly, score the student at 3 points.	Student responds correctly at Independent Level.  • Present student with prompt as written. • If student responds correctly, score the student at 9 points. • If student responds incorrectly, score the student at 6 points.	