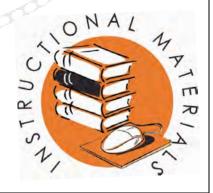
Addendum 2009 Science Specifications

for the

2010-2011 Florida State Adoption

of

Instructional Materials



Addendum Contents

The following three pages replace pages 8-10 of the **2009 Science Specifications for the 2010-2011 Florida State Adoption of Instructional Materials** published here:

http://www.fldoe.org/bii/instruct_mat/pdf/ScienceSpecs2009.pdf

General Description for Publishers' Submissions

Next Generation Sunshine State Standards for Science

The Next Generation Sunshine State Standards for Science were approved and adopted by the State Board of Education in February 2008. The revised science standards reflect a focus on building a deeper understanding of a smaller number of topics for each science course. The standards and benchmarks provide the focus for standards-based teaching and learning in Florida's K-12 schools. The Next Generation Sunshine State Standards for Science can be found online at http://www.floridastandards.org/Standards/FLStandardSearch.aspx.

Publishers must submit instructional materials specific to Florida's Next Generation Sunshine State Standards for Science.

Features of the Next Generation Sunshine State Standards for Science:

- The 2008 revision of the Sunshine State Standards for Science resulted in standards that define a smaller number of learning targets. The new science standards are arranged within eighteen "Big Ideas" to foster student learning progressions that are developed from K-12. The new science standards are grouped into four Bodies of Knowledge:
 - o Earth and Space Science
 - o Life Science
 - o Physical Science
 - Nature of Science
- The revised standards provide content specific benchmarks to guide instruction; these benchmarks have been aligned with each science course at each grade level.
- Grades K-8: The science benchmarks for grades K-8 are grade level specific and are built around 8-12 "Big Ideas" grouped within the four Bodies of Knowledge. The Big Ideas provide a framework for the development of essential concepts in science for each grade level.
- Grades 9-12: The science benchmarks for grades 9-12 are grade span specific and are built around standards which are grouped within the four Bodies of Knowledge. The standards provide a framework for the development of essential concepts in science in this grade span.
- The benchmark codes, standard numbers, and Big Idea numbers are intended for coding purposes only and are not intended to imply order of instruction or degree of importance.
 Instructional materials that do not include the benchmark and benchmark code at point of use in both the student and teacher major tool will not be recommended for adoption.
- The average number of benchmarks for each grade in the K-8 grade band has been reduced by about 50%. The revised science standards are designed to allow teachers and students to focus on a smaller number of learning targets and to develop a greater depth of understanding. Instructional materials must reflect this focus and cannot include material that goes beyond the scope of the concepts for a particular grade level or course. No more than 10% of the content in the major tool can address concepts

- outside of the realm of the required benchmarks for the grade or course for which it is being submitted.
- The revised science standards are designed to introduce science concepts and vocabulary at developmentally appropriate grade levels. Instructional materials must reflect this design and cannot require the use of science concepts or vocabulary at a grade level earlier than that designated in the standards.
- Committees of educators evaluated each science benchmark for cognitive complexity using an adapted version of Dr. Norman Webb's Depth of Knowledge classification system. Each science benchmark has been classified into one of three levels of cognitive complexity: high complexity, moderate complexity, or low complexity.

Science Benchmark Codes

Grades K-8

SC	5	Е	1	1
Subject	Grade	Body of Knowledge	Big Idea	Benchmark

Grades 9-12

SC	912	E	1	1
Subject	Grade Span	Body of Knowledge	Standard	Benchmark

Florida Science Course Descriptions

Florida's science course descriptions were evaluated and revised in 2008 by committees of educators in order to ensure coherence, focus, and rigor for each course description and in order to ensure alignment to the new science standards. The revised science course descriptions, which reflect the emphasis on building a deeper understanding of a smaller number of learning targets, can be found online at

http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx.

Please note that the science course descriptions are subject to State Board of Education approval. The draft course descriptions are scheduled for submission to the State Board of Education in July 2009.

Features of the revised Florida Science Course Descriptions:

- The Nature of Science Body of Knowledge benchmarks are embedded within each science course description at all grade levels. Instructional materials should reflect this approach and should integrate the Nature of Science benchmarks throughout the entire curriculum and not isolate the benchmarks into a separate unit.
- Each science course description for grades 6-12 includes two language arts benchmarks and two mathematics benchmarks. These benchmarks were identified by the committees as essential skills to be embedded in each science course. In addition, some science course descriptions include related health benchmarks. **Instructional materials must**

reflect this emphasis on embedded language arts, mathematics, and health benchmarks. Instructional materials that do not include these benchmarks and benchmark codes at point of use in both the student and teacher major tool will not be recommended for adoption.

- The order of the related benchmarks listed for each science course description is not intended to imply order of instruction or degree of importance.
- Access Points have been developed for each science benchmark in order to provide
 access to the general education curriculum for students with significant cognitive
 disabilities. The Access Points are learning targets that reflect the core intent of the
 standards with reduced levels of complexity. The three levels of complexity are
 participatory, supported, and independent. The Access Points are intended for use only
 for students with significant cognitive disabilities.