# **Leon County Schools Adoption Rubric 2024-2025**

Company: Discovery Education Course: M/J Comprehensive Science 3

## Book Title: Science Techbook for Florida by Discovery Education - M/J Comprehensive Science 3

Shows no evidence of meeting LCS standards

Shows minimal evidence of meeting LCS standards

Shows adequate evidence of meeting LCS standards

Shows overwhelming evidence of meeting LCS standards

Review Criteria	Comments (Cite specific examples with page numbers)	Score
	CONTENT	
Does the product align to the Florida State Academic Standards for Science?	Yes! Science Techbook for Florida by Discovery Education is aligned to FL State Academic Standards for Science (NGSSS), BEST for ELA, BEST for Math, and ELD standards. See both in product standards (digital/print) as well as these correlation documents.	
Is there a logical progression and organization of the materials?	Yes! Each concept contains a series of 5E lessons broken into learning activities that follow a logical progression and are designed to build student understanding of scientific concepts. Instruction in each concept launches with a real-world phenomenon to engage students and inspire them to make connections and ask questions that will drive their investigations. This important structure provides students with authentic experiences to engage in the Nature of Science throughout the unit. Students are introduced to the phenomenon in Engage lessons that feature hands-on investigations, images, data sets, or multimedia. As students progress through the concept, they circle back to the phenomenon to extend their understanding and explain it. Phenomenon Check-Ins throughout the unit enable students to develop coherent investigations and teachers to gain clear insights into students' progress on the Nature of Science development.  Middle School Science for Florida (Table of Contents)  Grade 8: Unit 9 Table of Contents (Properties of Matter)	

Does each unit provide opportunities for engagement, exploration, explanation, elaboration and evaluation (5Es)?

Yes! Science Techbook for Florida provides standards-driven, objective-aligned, multisensory instruction across the 5Es instructional cycle with hands-on investigations, virtual labs and interactives, multimedia, along with strategic supports to allow students the ability to engage, discover, and connect meaning to the expectations of the benchmarks. Real-world phenomena engage and connect learning across units and concepts. Creating evidence-based scientific explanations of phenomena frame each concept, providing purposeful context, scaffolded rigor, and progressive task complexity with authentic opportunities for the nature of science as well as explanatory and argumentative writing. Timely, embedded standards-driven assessments offer understanding check points for students and teachers across the instructional cycle. Explore More Resources for every Concept provide additional

opportunities for Background Building, Relearning and Acceleration.

Grade 8, Unit 9, Unit Resources, Unit Structure and Pacing

Does the product provide activities, questions, and materials that reflect the rigor demanded by Webb's Depth of Knowledge? Yes! In each Concept, students analyze images, hands-on activities, complex text, videos, and authentic data to evaluate information collected across the lessons to support a student generated claim. Students and teachers can review and provide feedback to one another to increase the rigor of student responses. Using a claim, evidence, reasoning framework for

responses, students demonstrate proficiency in analyzing evidence for accuracy and reliability when selecting the appropriate resources to support their claims related to the real-world phenomenon of the concept. A variety of assessment options that include formative, summative, scientific explanations, rubrics, and performance-based activities are carefully embedded in the cycle of learning to help teachers guide their students to mastery of key learning targets and objectives. The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints which can be auto scored. Our Assessment Builder tool allows educators to custom create assessments with their own questions or from our bank of thousands of standardsspecific items aligned to Webb's DOK.

#### Assessments



Does the product provide quality Yes! Key Literacy Features: Reading passages and articles throughout lessons multimedia and online resources that make A read-aloud text feature that allows students to hear text text connections to content more explicit? Notetaking and highlighting features to support the comprehension of informational texts Video and multimedia that support, complement, and enrich textual understanding, serving as a background knowledge builder An interactive glossary to foster the acquisition of academic language and domain-specific vocabulary Authentic opportunities for explanatory and argumentative writing Yes! Science Techbook for Florida's content matches student Is scaffolding provided to help students abilities and is aligned to grade level standards. Science connect real world examples to concepts? Techbook for Florida was developed to provide point-of-need support in a variety of scaffolding methods (UDL structures, multi-modal experiences, Lexile adjustments, graphic organizers). Remediation, on-level, and enrichment strategies are infused throughout the digital and print TE for approaching, advanced, and at-home learners. Explore More Resources for every Concept provide additional opportunities for Background Building, Relearning and Acceleration. Grade 8: Unit 9, Concept Periodic Table, Lesson 4 Lesson Planning Yes! There are multiple opportunities in which students will Is there meaningful alignment of diagrams, interact with data in the form of creating and interpreting illustrations, graphs, and maps to text tables, charts, and graphs in lessons and Hands on Activities materials? throughout the 5E sequence in each concept. In the 6-8 Science Techbook for Florida, students are given tasks to complete data tables, and self-assess their work using the embedded rubric. To ensure the latest high-quality science content and innovative strategies, Science Techbook for Florida is built on a digital platform that allows for updates following FLDOE processes. Timely, factual, accurate, and objective updates come from reliable experts in the field, such as University level staff, STEM professionals, and classroom teachers. Data and graphs are cited from leading scientific organizations like NASA, USGS, and NOAA. The content resources, variety of media graphics, hands on activities, interactives, slideshow lessons, and tools in Science Techbook for Florida are presented in a manner that is contextually relevant and representative of real-world science including concepts, theories, alignment to standards, and STEM career connections. Investigating The Structure of Atoms Yes! Students work in the roles of scientists and engineers as Does the product provide real-world and they discover the wonders around them through practices cross-curricular applications? such as researching curiosities, designing experiments, solving problems, and using models. The content resources, variety of media graphics, hands on activities, interactives, slideshow lessons, and tools in Science Techbook for Florida are presented in a manner that is contextually relevant and representative of real-world science including concepts, theories, alignment to standards, and STEM career connections. Grade 8: Unit 12, Concept Photosynthesis and Respiration, Lesson 7

Does the text show a respect of and value for diverse cultures, races, and ethnicities?

Yes! In all instances where humans are presented to students and teachers in the program, every effort has been made to represent fairness in gender, ethnicity, age and multicultural groups in accordance with Florida DOE rules and regulations. Discovery Education has made concerted efforts to represent underrepresented groups and their contributions to research, within these sections.

Grade 8: Unit 9, Concept Periodic Table, Lesson Extension

#### Program Guide

Differentiation resources provided for ELLS, struggling readers, students w/ disabilities, and advanced learners?

Yes! The narrative and visuals consistently support all students in the acquisition of science content knowledge through active learning in reading and listening as well as critical supports right at point of need. Microsoft Immersive Reader is embedded to help support ELL students or any student needing more accessible content. Text translation is available in 100+ languages and students can have the text read aloud in English and in their native languages. The interactive glossary provides vivid animation, images, videos, and read aloud to support vocabulary development and comprehension. In addition, each concept features robust differentiation opportunities and scaffolded strategies at point-of-use for English Language Learners, Approaching learners, and Advanced learners for immediate implementation, and sentence frames for writing and oral response activities. Multiple lexile reading levels provide immediate support for reading comprehension. Teacher materials include scaffolded strategies for approaching, advanced, and English learners. Differentiation callouts highlight further support for diverse learners in achieving mastery of the learning goals. Embedded in lessons, research-based Spotlight on Strategies supports student development of literacy skills, background knowledge and comprehension, and scientific vocabulary using a variety of graphic organizers, concepts maps, and more. Explore More Resources for every Concept provide additional opportunities for Background Building, Relearning and Acceleration.

Differentiation Resources (pdf)

#### Lesson Planning

#### Grade 8: Unit 9, Concept Periodic Table, Lesson 4



Review Criteria	Comments (Cite specific examples with page numbers)	Score
TEA	CHER MATERIALS	
Do ancillary materials offer valuable content support for teachers who use them?	Discovery Education <i>Science Techbook for Florida</i> is all encompassing and provides ALL resources needed for students to be engaged, involved, and proficient throughout each lesson without needing to be supported with ancillary resources.	
Are the teacher's digital resources easy to access, use, and manipulate?  Does tech support appear to be user-friendly?	Yes! In digital Science Techbook for Florida, teachers have access to both the student view of content as well as all the supports available in the print Teacher's Edition, with additional access to differentiation supports at point of use, digital tools, and other resources.  Program Guide	
The teacher guide provides information that would aid new teachers and veterans in their instructional approach in the classroom?	Yes! In digital Science Techbook for Florida each unit provides extensive support for teacher planning at the unit and concept lesson level, including information on the structure, pacing, background knowledge, material preparation (including a Slideshow for every lesson), learning objectives, and standard alignment for students to gain understanding and achieve mastery of the new content.  Grade 8: Unit 9, Unit Resources (top right)  Grade 8: Unit 9, Concept 1: Teacher Overview  Grade 8: Unit 9, Concept 1, Lesson 1: Lesson Planning	
Do the physical attributes (size, weight, etc.)? of the print text provide for mobility and ease of use?	Program Guide  Yes! Science Techbook for Florida was designed with multiple rounds of feedback on user experience from FL supervisors, teachers and coaches and is logically organized in a manner to support teachers and students, especially in a post-pandemic era. Science Techbook for Florida is designed as a 4-Unit approach for digital and print. This provides the flexibility of a district to arrange the units in the order of instruction for their specific scope and sequence. Utilizing the 4-Unit print approach, based on feedback from teachers, provides students a lighter option for transport and if lost, only requires replacement of the single Unit not the whole textbook.	
Does the digital text provide adequate functionality for whole- class instruction, including but not limited to annotating text, enlarging and minimizing, audio reading of text, translating to other languages, copying into text document, changing colors, etc.?	Yes! Science Techbook for Florida by Discovery Education was developed utilizing a UDL framework in which students have multiple means of engagement, representation, and expression throughout all lessons. Science Techbook for Florida provides point-of-need support in a variety of scaffolding methods (UDL structures, multimodal resources, Lexile adjustments, Interactive Text, Immersive Reader, tools, graphic organizers, and student choice, multimodal formative and summative assessments). Differentiation callouts and strategies are infused throughout the digital and print TE for approaching, advanced, and English learners. Students of all abilities and backgrounds will be highly engaged and able to see themselves as valuable contributors to the science community.  Comp 3 UDL Questionnaire	

Does the product provide an effective digital planning tool as well as standard lesson plan templates?

Grade 8: Unit 9, Concept 1: Teacher Overview

Grade 8: Unit 9, Concept 1, Lesson 1: Lesson Planning

Does the product include suggested activities and resources to accommodate advanced learners, struggling readers, ESE students, and/or second language learners?

Yes! Teacher planning materials include scaffolded strategies at point-of-use for approaching, advanced, and English earners. Differentiation callouts highlight further support for diverse learners in achieving mastery of the learning goals. Research-based Spotlight on Strategies are also presented to engage students in meaningful, effective, and practical ways that make connections to content and media more empowering. In the core digital text, students and teachers can have text read aloud, highlight important information, and annotate content with sticky notes. Select the text within any lesson, and a reader tool will appear. In addition, content is available in English and authentically translated Spanish, and content can be translated into nearly 90 additional languages using browser translation extensions. Explore More Resources for every Concept provide additional opportunities for Background Building, Relearning and Acceleration.

Grade 8: Unit 9, Concept Periodic Table, Lesson 4

### Lesson Planning

Is each unit and lesson accompanied by useful interactive presentations, test banks, virtual and hands-on labs, relevant videos, literacy strategies for the content area, and online support?

Yes! Discovery Education Science Techbook is a comprehensive and engaging teaching and learning package that sparks student curiosity and features an awardwinning digital platform. Interactives, hands-on, multimedia, and literacy combine within the lesson cycle to provide students the opportunity to engage with the Nature of Science while mastering content knowledge of the Science and B.E.S.T. standards. Formative, Summative, and SSA Prep assessments along with an Assessment Builder test item bank are provided within the same platform.

Grade 8: Unit 9, Concept Periodic Table, Lesson 4

Grade 8, Unit 9, Concept 1, Lesson 4 – <u>Lesson Slideshow</u>

#### Assessment Tour

Text provided has quality, detailed sample answers for questions included in the student edition?

Yes! Multisensory instruction is provided across the 5Es instructional cycle with hands-on investigations, virtual labs and interactives, multimedia, along with strategic supports and rubrics to allow students the ability to engage, discover, and connect meaning to the expectations of the benchmarks. Formative assessments include rationales for incorrect answers and guide students to consider additional options as they grow in their thinking. Sample student responses help teachers facilitate student sensemaking.



Review Criteria	Comments (Cite specific examples with page numbers)	Score
	TUDENT MATERIALS	
Does the text have appropriate readability for the grade-level and subject matter?	Yes! The narrative and visuals consistently support all students in the acquisition of science content knowledge through active learning in reading and listening as well as critical supports right at point of need. Microsoft Immersive Reader is embedded to help support ELL students or any student needing more accessible content. Text translation is available in 100+ languages and students can have the text read aloud in English and in their native languages. The interactive glossary provides vivid animation, images, videos, and read aloud to support vocabulary development and comprehension.	
	Program Guide - Literacy	
Is the text written to engage students in the specified content and skills referenced in the standards?	Yes! Science Techbook for Florida provides a variety of activities that actively engage physical and mental participation in the learning process for students. Hands-on activities across all grades, all units, all concepts ensure that students have hands-on science learning. Embedded in lessons, Spotlight on Strategies supports student development of literacy skills, background knowledge and comprehension, and scientific vocabulary using a variety of graphic organizers, concepts maps, and more. Students not only build their background content knowledge, but they also develop and strengthen their literacy skills, through robust literacy resources and literacy-supported lessons that use research-based instructional reading, writing, speaking, and listening strategies, practiced with their peers. Lesson check-ins allow insights into vocabulary development and reinforcement for students and families.	
	Literacy in Science Techbook for Florida	
Are there alternative text materials or support resources for students who struggle with reading the text?	Yes! Science Techbook for Florida provides a variety of activities that actively engage physical and mental participation in the learning process for students. Hands-on activities across all grades, all units, all concepts ensure that students have hands-on science learning. Embedded in lessons, Spotlight on Strategies supports student development of literacy skills, background knowledge and comprehension, and scientific vocabulary using a variety of graphic organizers, concepts maps, and more. Students not only build their background content knowledge, but they also develop and strengthen their literacy skills, through robust literacy resources and literacy-supported lessons that use research-based instructional reading, writing, speaking, and listening strategies, practiced with their peers. Lesson check-ins allow insights into vocabulary development and reinforcement for students and families.  *Literacy in Science Techbook for Florida*	

Yes! Science Techbook for Florida provides a variety of Do the print and digital texts provide tools activities that actively engage physical and mental to help define vocabulary and support participation in the learning process for students. Hands-on background knowledge so students can activities across all grades, all units, all concepts ensure that better understand content? students have hands-on science learning. Embedded in lessons, Spotlight on Strategies supports student development of literacy skills, background knowledge and comprehension, and scientific vocabulary using a variety of graphic organizers, concepts maps, and more. Students not only build their background content knowledge, but they also develop and strengthen their literacy skills, through robust literacy resources and literacy-supported lessons that use researchbased instructional reading, writing, speaking, and listening strategies, practiced with their peers. Lesson check-ins allow insights into vocabulary development and reinforcement for students and families. Literacy in Science Techbook for Florida Yes! Science Techbook for Florida provides a variety of Do the digital and print texts provide ease activities that actively engage physical and mental of use and accessibility to all students, participation in the learning process for students. Hands-on including but not limited to annotating activities across all grades, all units, all concepts ensure that text, enlarging and minimizing, audio students have hands-on science learning. Embedded in lessons, Spotlight on Strategies supports student development reading of text, translating to other of literacy skills, background knowledge and comprehension, languages, copying into text document, and scientific vocabulary using a variety of graphic organizers, changing colors, etc.? concepts maps, and more. Students not only build their background content knowledge, but they also develop and strengthen their literacy skills, through robust literacy resources and literacy-supported lessons that use researchbased instructional reading, writing, speaking, and listening strategies, practiced with their peers. Lesson check-ins allow insights into vocabulary development and reinforcement for students and families. Literacy in Science Techbook for Florida Are there opportunities for Yes! The Elaborate section, which features STEM careers and STEM projects, extends learning for all students and asks them meaningful project-based learning or to apply key ideas from the concept in a new context. extensions for standards taught in each unit? Grade 8: Unit 9, Concept 1 Periodic Table: Elaborate Extension Yes! The program features a wide variety of content types, Does the text contain interesting graphics including images, video, audio, text, interactives, and hands-on and other meaningful text features that activities. These multimedia resources provide multiple command the students' attention? representations of the content and the flexibility for teachers

Grade 8: Unit 9, Concept Periodic Table

resources.

to easily provide targeted content and instruction to whole groups or individual students. Ensuring all students see themselves as contributors to the scientific community, Science Techbook presents students with diverse representation of communities through text and media

Literacy in Science Techbook for Florida

Do the units and chapters contain comprehension questions that prompt students to think about how concepts are applied to the real world?	Yes! As students interact with the diverse text in literacy lessons, they answer comprehension and synthesis questions after each section to drive reflection and share their thinking with their peers.  Assessment Tour
Are additional readings provided in each unit and lesson study?	Yes! Explore More Resources for every Concept provide additional opportunities for Background Building, Relearning and Acceleration. These resources include reading passages, interactives, videos, images, etc.
Are the print and online texts available in other languages?	Yes! Discovery Education Science Techbook for Florida is available in authentically translated Spanish in digital and print. In addition, text translation is available in 100+ languages using the embedded Microsoft Immersive Reader or the native browser translation and students can have the text read aloud in English and in their native languages.

Review Criteria	Comments	Score
	(Cite specific examples with page numbers)	
	ASSESSMENT	
Does the program include multiple assessments (e.g., multiple choice, short answer questions, longer essays, performance-based tasks, etc.) in print and digital form?	Yes! A variety of assessment options that include formative, summative, scientific explanations, rubrics, and performance-based activities are carefully embedded in the cycle of learning to help teachers guide their students to mastery of key learning targets and objectives. The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints which can be auto scored. Our Assessment Builder tool allows educators to custom create assessments with their own questions or from our bank of thousands of standards-specific items.  Grade 8, Unit 9 Concept Periodic Table, Lesson 7 and Summative Assessment	
Do the assessments align to the Florida Academic Standards for Science (2008)?	Assessment Tour  Yes! The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints which can be auto scored.  Assessment Tour	
Are formative assessment tasks aligned to standards provided throughout each lesson and unit?	Yes! A variety of assessment options that include formative, summative, scientific explanations, rubrics, and performance-based activities are carefully embedded in the cycle of learning to help teachers guide their students to mastery of key learning targets and objectives. The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints which can be auto scored. Our Assessment Builder tool allows educators to custom create assessments with their own questions or from our bank of thousands of standards-specific items.  Grade 8, Unit 9 Concept Periodic Table, Lesson 7 and Summative Assessment  Assessment Tour	
Do the assessments represent content reading questions (like the statewide assessment)?	Yes! The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints which can be auto scored. Our Assessment Builder tool allows educators to custom create assessments with their own questions or from our bank of thousands of standards-specific items.  Grade 8, Unit 9 Concept Periodic Table, Lesson 7 and Summative Assessment  Assessment Tour	

Yes! Scripted, probing questions and sample student For assessment items requiring extensive responses help teachers facilitate student sensemaking. responses, are exemplary responses Discourse questions elicit prior knowledge, activate scientific provided to guide teacher evaluation of sensemaking, and support students in using evidence to student work? construct verbal claims. All discourse questions serve as formative assessment opportunities and include sample student responses. **Assessment Tour** Yes! A variety of assessment options that include formative, Are rubrics included for performance summative, scientific explanations, rubrics, and performanceassessment items? based activities are carefully embedded in the cycle of learning to help teachers guide their students to mastery of key learning targets and objectives. Describing the Model **Assessment Tour** Yes! Science Techbook provides several formative Is Progress monitoring built into the and summative assessment opportunities, carefully embedded online platform? in the cycle of learning to help teachers guide their students to mastery of key learning targets and objectives. These assessment opportunities allow teachers and students to monitor progress and provide direct practice with item types across a variety of assessment formats. Program Guide - Assessment

**Assessment Tour** 

Is there a specific test preparation workbook with assessment questions modeled for Florida specific testing?

Yes! The Science Techbook for Florida assessment team considered both the FLDOE SSA Test Item Specification docs for grade 8 and the content complexity ratings when designing the Concept Summative blueprints and SSA test prep. Six FLDOE SSA Test assessments are available with fair-game benchmarks that can be used as PM1, PM2, PM3 style of progress monitoring. These assessments are located under the Assessments tab > Additional Assessments. These assessments can be edited, printed, and are available in Spanish.

