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| SC Science Grade Level Instructional Materials Review Process Form  Sixth Grade |

*Purpose: This process is designed to assist schools/districts with decision making regarding the adoption of science materials as correlated to the South Carolina College- and Career-Ready Science Standards 2021.*

*Directions: Use the* [*South Carolina College-and Career-Ready Science Standards 2021*](https://ed.sc.gov/instruction/standards-learning/science/standards/south-carolina-college-and-career-ready-science-standards-2021-approved/) *to determine how the instructional material(s) rate in providing opportunities for “Learning in Three Dimensional Science Classrooms” for each performance expectation. Specifically, how closely does each instructional material address the Science and Engineering Practices (SEPs), Disciplinary Core Ideas (DCIs) and Crosscutting Concepts (CCCs) as identified in the corresponding color for each performance expectation below. Total the ratings of the performance expectations to provide an overall rating for the instructional material. A notes section has been provided for observations and general information that might support the decision-making process.*

***Instructional Material Providers / Title(s):*** *All science* [*instructional materials*](https://ed.sc.gov/finance/instructional-materials/instructional-materials-and-district-selections/2022-23-instructional-materials-adoption-information/draft-2022-23-list-of-adopted-instructional-materials-for-science-k-8/) *available for the South Carolina Science adoption are listed below alphabetically based on provider. Order of appearance* ***does not indicate*** *a preference of curricular material.*

* Accelerate Learning Inc
  + *STEMscopes 3D*
* Discovery Education, Inc.
  + *Discovery Education South Carolina Elementary Science*
* Houghton Mifflin Harcourt Publishing Company
  + *HMH Into Science*
* McGraw Hill LLC
  + *South Carolina Inspire Science*
* SASC, LLC d/b/a Activate Learning
  + *IQWST*
* Savvas Learning Company LLC
  + *South Carolina Elevate*

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| **6th Grade** | | |
| Science and Engineering Practices (SEPs):   * Developing and Using Models * Planning and Carrying Out Investigations * Analyzing and Interpreting Data * Constructing Explanations and Designing Solutions * Engaging in Argument from Evidence * Obtaining, Evaluating and Communicating Information | Disciplinary Core Ideas (DCI):   * Structure and Properties of Matter * Definitions of Energy * Conservation of Energy and Energy Transfer * Definitions of Energy * Wave Properties * Electromagnetic Radiation * Structure and Function * Information Processing * The History of Planet Earth * Earth Materials and Systems * The Roles of Water in Earth’s Surface Processes * Weather and Climate * Plate Tectonics and Large-Scale System Interactions * Natural Hazards * Defining and Delimiting and Engineering Problem * Developing Possible Solutions * Influence of Engineering, Technology and Science on Society and the Natural World * Interdependence of Science, Engineering and Technology | Crosscutting Concepts (CCCs):   * Patterns * Cause and Effect * Scale, Proportion and Quantity * Systems and System Models * Energy and Matter * Structure and Function |

**SC SDE 2022-23 Instructional Materials** [**Adoption Information**](https://ed.sc.gov/finance/instructional-materials/instructional-materials-and-district-selections/2022-23-instructional-materials-adoption-information/)**:**

* State Adopted [Instructional Materials](https://ed.sc.gov/finance/instructional-materials/instructional-materials-and-district-selections/2022-23-instructional-materials-adoption-information/draft-2022-23-list-of-adopted-instructional-materials-for-science-k-8/) for Science (K–8)
  + *State Adopted* [*Supplemental*](https://ed.sc.gov/finance/instructional-materials/instructional-materials-and-district-selections/2022-23-instructional-materials-adoption-information/draft-2022-23-list-of-adopted-supplemental-instructional-materials-for-science-k-8/) *Instructional Materials for Science (K–8)*
  + [*Ancillary And Services List*](https://ed.sc.gov/finance/instructional-materials/instructional-materials-and-district-selections/2022-23-instructional-materials-adoption-information/draft-2022-23-ancillary-and-services-list-for-adopted-science-k-8-materials/) *for Adopted Instructional Materials for Science (K-8)*

| **6th Grade** | | | | | |
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| |  |  |  |  | | --- | --- | --- | --- | | *\*Use the following scale to determine the rating for each Instructional Material (IM) based on the performance expectation:* | | | | | **Fully** addresses | **Partially** addresses | **Minimally** addresses | **Does not** address | | 3 | 2 | 1 | 0 | | | | | | |
| ***Performance Expectations:*** *The standard that represents the three-dimensional end-of-instruction goal aligned to what students should know, understand, and be able to perform to show proficiency in science and engineering.* | **IM:** | **IM:** | **IM:** | **IM:** | **IM:** |
| 6-PS1-4. Develop and use a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. |  |  |  |  |  |
| **6-PS3-3.** Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. |  |  |  |  |  |
| **6-PS3-4.** Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. |  |  |  |  |  |
| **6-PS4-2.** Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. |  |  |  |  |  |
| **6-LS1-1.** Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. |  |  |  |  |  |
| **6-LS1-2.** Develop and use a model to describe the function of a cell as a whole and ways the parts of cells contribute to the function. |  |  |  |  |  |
| **6-LS1-3.** Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. |  |  |  |  |  |
| **6-LS1-8.** Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. |  |  |  |  |  |
| **6-ESS1-4.** Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth’s 4.6-billion-year-old history. |  |  |  |  |  |
| **6-ESS2-1.** Develop a model to describe the cycling of Earth’s materials and the flow of energy that drives this process. |  |  |  |  |  |
| **6-ESS2-2.** Construct an explanation based on evidence for how geoscience processes have changed Earth’s surface at varying time and spatial scales. |  |  |  |  |  |
| **6-ESS2-3.** Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. |  |  |  |  |  |
| **6-ESS2-4.** Develop a model to describe the cycling of water through Earth’s systems driven by energy from the sun and the force of gravity. |  |  |  |  |  |
| **6-ESS2-5.** Analyze and interpret data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions. |  |  |  |  |  |
| **6-ESS2-6.** Develop and use models to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates. |  |  |  |  |  |
| **6-ESS3-2.** Analyze and interpret data on natural hazards to identify patterns, which help forecast future catastrophic events and inform the development of technologies to mitigate their effects. |  |  |  |  |  |
| The content is engaging for students. |  |  |  |  |  |
| Virtual labs are included AND appropriate. |  |  |  |  |  |
| The materials provided are easy to use by all (*students and teachers*). |  |  |  |  |  |
| Materials are equitable for all learners. |  |  |  |  |  |
| Kit materials are included and support student learning. |  |  |  |  |  |
| All materials are compatible with current LMS. |  |  |  |  |  |
| Included videos are relevant and engaging. |  |  |  |  |  |
| Materials exemplify evidence of student learning. |  |  |  |  |  |
| These materials are described as “high quality”. |  |  |  |  |  |
| These materials are described as “effective”. |  |  |  |  |  |
| Additional Criteria: |  |  |  |  |  |
| **Total Score:** |  |  |  |  |  |

Notes: