Science (Middle School Life Science) Evaluation Form

2025 Curricular Materials Review

# Publisher information

* Publisher Name:
* Title:
* ISBN #:
* Author:
* Copyright:
* Most Recently Published Edition and Website:
* Materials provided for evaluation:
* Intended Teacher Audience(s):
* Intended Student Audience(s):
* Is this curriculum in a digital format, print format, or both?

# Instruction

## Publishing Company

* Complete the curriculum evaluation form below. Please provide written justification as to how the material meets the criterion along with location references. If a justification requires additional space, please submit a response on an additional document.

## Review Team Member:

* Please use information and attachments to complete the curriculum evaluation form.
* Explain any discrepancies between your findings and the provided information.
* Findings, explanations, and comments should directly reflect the rubric.

# Scoring for Middle School Life science Alignment to Science Standards

To evaluate each grade or course’s materials for alignment to [**Idaho Content Standards**](https://www.sde.idaho.gov/topics/admin-rules/files/negotiated-rulemaking/Idaho-K-12-State-Standards-for-Science.pdf), analyze the materials against the relevant criteria in the tables below. Instructional materials must meet most criteria and metrics to align with content standards.

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| Standard for Science is not evident. | There is some evidence of the Standard for Science. | Materials explicitly align to and support the Standard for Science through regular and authentic engagement opportunities for students. |  |

Middle School Life Science

| From Molecules to Organisms: Structure and Processes | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| *Students who demonstrate understanding can:* |
| Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. (1.1) | 0 1 2 N/A |  |
| Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. (1.2) | 0 1 2 N/A |  |
| Make a claim supported by evidence for how a living organism is a system of interacting subsystems composed of groups of cells. (1.3) | 0 1 2 N/A |  |
| Construct a scientific argument based on evidence to defend a claim of life for a specific object or organism. (1.4) | 0 1 2 N/A |  |
| Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. (1.5) | 0 1 2 N/A |  |
| Develop a conceptual model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as matter moves through an organism. (1.6) | 0 1 2 N/A |  |

| Ecosystems: Interactions, Energy and Dynamics | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| *Students who demonstrate understanding can:* |
| Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. (2.1) | 0 1 2 N/A |  |
| Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. (2.2) | 0 1 2 N/A |  |
| Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. (2.3) | 0 1 2 N/A |  |
| Develop a model to describe the flow of energy through the trophic levels of an ecosystem. (2.4) | 0 1 2 N/A |  |
| Construct an argument supported by evidence that changes to physical or biological components of an ecosystem affect populations. (2.5) | 0 1 2 N/A |  |
| Design and evaluate solutions for maintaining biodiversity and ecosystem services. (2.6) | 0 1 2 N/A |  |

| Heredity: Inheritance and Variation of Traits | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| *Students who demonstrate understanding can:* |
| Develop and use a model to describe why mutations may result in harmful, beneficial, or neutral effects to the structure and function of the organism. (3.1) | 0 1 2 N/A |  |
| Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. (3.2) | 0 1 2 N/A |  |

| Biological Adaptation: Unity and Diversity | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| *Students who demonstrate understanding can:* |
| Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past. (4.1) | 0 1 2 N/A |  |
| Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer relationships. (4.2) | 0 1 2 N/A |  |
| Analyze visual evidence to compare patterns of similarities in the anatomical structures across multiple species of similar classification levels to identify relationships. (4.3) | 0 1 2 N/A |  |
| Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals’ probability of surviving and reproducing in a specific environment. (4.4) | 0 1 2 N/A |  |
| Obtain, evaluate, and communicate information about how technologies allow humans to influence the inheritance of desired traits in organisms. (4.5) | 0 1 2 N/A |  |
| Use mathematical models to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time. (4.6) | 0 1 2 N/A |  |

Category 1: 3D Design (Lessons and Units)   
Lessons and units are designed so students make sense of phenomena and/or design solutions to problems by engaging in student performances that integrate the three dimensions.

| Lessons and units include clear and compelling evidence of the following: | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| **Explaining Phenomena/Designing Solutions:** Making sense of phenomena and/or designing solutions to a problem drive student learning.   * Student questions and prior experiences related to the phenomenon or problem motivate sense-making and/or problem solving. * The focus of the lesson is to support students in making sense of phenomena and/or designing solutions to problems. * When engineering is a learning focus, it is integrated with developing disciplinary core ideas from physical, life, and/or earth and space sciences. | 0 1 2 N/A |  |
| **Three Dimensions:** Builds understanding of multiple grade-appropriate elements of the science and engineering practices (SEPs), disciplinary core ideas (DCIs), and crosscutting concepts (CCCs) that are deliberately selected to aid student sense-making of phenomena and/or designing of solutions. | **Three Dimensions (overall)**  0 1 2 N/A |  |
| 1. Provides opportunities to develop and use specific elements of the SEP(s). | 0 1 2 N/A |  |
| 1. Provides opportunities to develop and use specific elements of the DCI(s). | 0 1 2 N/A |  |
| 1. Provides opportunities to develop and use specific elements of the CCC(s). | 0 1 2 N/A |  |
| **Integrating the Three Dimensions:** Student sense-making of phenomena and/or designing of solutions requires student performances that integrate elements of the SEPs, CCCs, and DCIs. | 0 1 2 N/A |  |
| **Unit Coherence:** Lessons fit together to target a set of standards.   * Each lesson builds on prior lessons by addressing questions raised in those lessons, cultivating new questions that build on what students figured out, or cultivating new questions from related phenomena, problems, and prior student experiences. * The lessons help students develop toward proficiency in a targeted set of performance expectations. | 0 1 2 N/A |  |
| **Multiple Science Domains:** *When appropriate*, links are made across the science domains of life science, physical science and Earth and space science.   * Disciplinary core ideas from different disciplines are used together to explain phenomena. * The usefulness of crosscutting concepts to make sense of phenomena or design solutions to problems *across science domains* is highlighted. | 0 1 2 N/A |  |
| **Math and ELA:** Provides grade-appropriate connection(s) to the Idaho Content Standards in Mathematics and/or English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects. | 0 1 2 N/A |  |

# CATEGORY 2: Instructional Supports (Lessons and Units)

Lessons and units support three-dimensional teaching and learning for ALL students by placing the lesson in a sequence of learning for all three dimensions and providing support for teachers to engage all students.

| Lessons and units include clear and compelling evidence of the following: | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| **Relevance and Authenticity:** Engages students in authentic and meaningful scenarios that reflect the practice of science and engineering as experienced in the real world.   * Students experience phenomena or design problems as directly as possible (firsthand or through media representations). * Includes suggestion for how to connect instruction to the students’ home, neighborhood, community and/or culture as appropriate. * Provides opportunities for students to connect their explanation of a phenomenon and/or their design solution to a problem—to questions from their own experience. | 0 1 2 N/A |  |
| **Student Ideas:** Provides opportunities for students to express, clarify, justify, interpret, and represent their ideas and respond to peer and teacher feedback orally and/or in written form as appropriate. | 0 1 2 N/A |  |
| **Building Progressions:** Identifies and builds on students’ prior learning in all three dimensions, including providing the following support to teachers:   * Explicitly identifying prior student learning expected for all three dimensions. * Clearly explaining how the prior learning will be built upon. | 0 1 2 N/A |  |
| **Scientific Accuracy:** Uses scientifically accurate and grade-appropriate scientific information, phenomena, and representations to support students’ three-dimensional learning. | 0 1 2 N/A |  |
| **Teacher support for unit coherence:** Supports teachers in facilitating coherent student learning experiences over time by:   * Providing strategies for linking student engagement across lessons (e.g. cultivating new student questions at the end of a lesson in a way that leads to future lessons, helping students connect related problems and phenomena across lessons, etc.). * Providing strategies for ensuring student sense-making and/or problem-solving is linked to learning in all three dimensions. | 0 1 2 N/A |  |

# CATEGORY 3: Monitoring Student Progress (Lessons and Units)

Lessons and units support monitoring student progress in all three dimensions as students make sense of phenomena and/or design solutions to problems.

| Lessons and units include clear and compelling evidence of the following: | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| **Monitoring student performances:** Elicits direct, observable evidence of three-dimensional learning; students are using practices with core ideas and crosscutting concepts to make sense of phenomena and/or to design solutions. | 0 1 2 N/A |  |
| **Formative:** Embeds formative assessment processes throughout that evaluate student learning to inform instruction. | 0 1 2 N/A |  |
| **Scoring guidance:**  Includes aligned rubrics and scoring guidelines that provide guidance for interpreting student performance along the three dimensions to support teachers in (a) planning instruction and (b) providing ongoing feedback to students. | 0 1 2 N/A |  |
| **Unbiased tasks/items:** Assesses student proficiency using methods, vocabulary, representations, and examples that are accessible and unbiased for all students. | 0 1 2 N/A |  |
| **Coherent assessment system**: Includes pre-, formative, summative, and self-assessment measures that assess three-dimensional learning. | 0 1 2 N/A |  |

# Scoring for Best Practices

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of the teaching practice. | The teaching practice is embedded in some lessons. | Materials regularly embed supports for teachers to implement best practices. |  |

Scoring for Alignment to Best Practices

| Best Practices | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. Materials contain clear statements and explanations of science and engineering practices (SEPs), disciplinary core ideas (DCIs), and crosscutting concepts (CCCs). | 0 1 2 N/A |  |
| 1. Materials provide questioning and discussion techniques that promote learning through thinking, discussion, and reflection. | 0 1 2 N/A |  |
| 1. Digital materials and assessments are easy to edit and revise and access to distribute and/or print. | 0 1 2 N/A |  |
| 1. Materials contain teacher-specific instructions and explanations for expanding content knowledge and lesson planning development. | 0 1 2 N/A |  |

# Scoring for Multi-Tiered Systems of Support

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of the feature. | The feature is included and partially aligned to Tier II instruction. | The feature is included and fully aligned to Tier II instruction. |  |

## Scoring for Alignment to Idaho Multi-Tiered Systems of Support

| Multi-tiered Instruction | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. **Interventions:** Materials provide interventions aligned to core instruction. Interventions are more frequent and varied to support acquisition of identified skills. | 0 1 2 N/A |  |
| 1. **Differentiated Instruction:** Provides guidance for teachers to support differentiated instruction by including:  * Materials provide a variety of resources and strategies for small group instruction that can be used for differentiation in the general education classroom. * Supportive ways to access instruction, including appropriate linguistic, visual, and kinesthetic engagement opportunities that are essential for effective science and engineering learning and particularly beneficial for multilingual learners and students with disabilities. * Extra support (e.g. phenomena, representations, tasks) for students who are struggling to meet the targeted expectations. * Extensions for students with high interest or who have already met the performance expectations to develop deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts. | 0 1 2 N/A |  |
| 1. **Scaffolded differentiation over time:** Provides supports to help students engage in the practices as needed and gradually adjusts supports over time so that students are increasingly responsible for making sense of phenomena and/or designing solutions to problems. | 0 1 2 N/A |  |
| 1. **Opportunity to learn:** Provides multiple opportunities for students to demonstrate performance of practices connected with their understanding of disciplinary core ideas and crosscutting concepts and to receive feedback. | 0 1 2 N/A |  |

# Scoring for Additional Indicators of Quality Materials

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of scaffolding, differentiation elements, or engaging tools. | There is some evidence of scaffolding, differentiation elements, or engaging tools. | Materials include scaffolding and differentiation elements as well as engaging tools. |  |

Scoring for Alignment to Additional Indicators of Quality Materials

| Indicators of Quality Materials | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. Materials provide examples of scaffolding and guided practice. | 0 1 2 N/A |  |
| 1. Materials include supports for differentiation, pacing, remediation and extension activities, and alternative teaching approaches. | 0 1 2 N/A |  |
| 1. Materials provide instructional strategies to accommodate the learning differences of all students. | 0 1 2 N/A |  |
| 1. Materials are relevant and interesting for grade level with authentic contexts and tools that allow students to make connections. | 0 1 2 N/A |  |
| 1. Materials integrate technology and interactive tools, visuals, videos, or dynamic software to engage students. | 0 1 2 N/A |  |
| 1. Materials are available in language(s) other than English. | Yes N/A |  |

For Questions Contact

Content & Curriculum – Curricular Materials

Idaho Department of Education

650 W State Street, Boise, ID 83702

208 332 6800 | www.sde.idaho.gov