**This advisory recommendation has not been approved by the Instructional Quality Commission or the State Board of Education.**

# REVIEW PANEL ADVISORY RECOMMENDATION 2018 SCIENCE ADOPTION OF INSTRUCTIONAL MATERIALS

| **Publisher** | **Program** | **Grade Level(s)** |
| --- | --- | --- |
| National Geographic Learning, a division of Cengage Learning, Inc. | National Geographic Exploring Science | K–6i |

## Program Summary:

National Geographic Exploring Science includes: Earth Science Big Book (EBB); Life Science Big Book (LBB); Physical Science Big Book (PBB); Let’s Do Science Big Book (DBB); Teacher’s Edition (TE); Student Edition (SE). Additional components include the Assessment Handbook, Science Notebook Companion, and the Exploring Science Through Literacy Readers. The program is available in print and digital formats.

## Recommendation:

National Geographic Exploring Science is recommended for adoption for K–6i because the instructional materials include content as specified in the Next Generation Science Standards for California Public Schools (CA NGSS) and meet all the criteria in Category 1 with strengths in categories 2–5.

## Criteria Category 1: Alignment with the CA NGSS Three-Dimensional Learning

The program includes content as specified in the CA NGSS and includes a well-defined sequence of instructional opportunities that provides a path for all students to become proficient in all grade-level performance expectations.

**Citations:**

* Criterion #1.1: Grade K, TE pp.T32-T44; Grade 1, TE pp.97a-97c; Grade 2, TE pp.45e-45f; Grade 3, TE pp.T32-T40; Grade 4, TE pp.109a-109c; Grade 5, TE pp.T32-T48; Grade 6, TE pp.39a-39d. We found numerous exemplars of the standards being fully covered in kindergarten and grade three.
* Criterion #1.5: Grade K, TE Life Science pp.27a-27d. The material demonstrates support for instructional opportunities and assessments that engage students in three dimensional learning.

1

* Criterion #1.11: Grade 3, TE pp.40-41; Grade 5, TE pp.126-128; Grade 5, SE pp.30-31 and pp.124-125. The materials show many different demographic groups which are represented throughout its resources with examples of people who used their context, learning, and intelligence to make important contributions to society.
* Criterion #1.12: Grade 4, TE p.55c. The material shows grade level linkages with California Common Core.
* Criterion #1.14: Grade 1, TE pp.171a-d. The material shows differentiated instruction for students with disabilities, English Language Learners and building academic vocabulary for all students.
* Criterion #1.15: Grade 2, TE p.37c. The material demonstrates the inclusion of environmental principles and concepts within the instructional resources.
* Criterion #1.18: Grade 2, TE p.7b; Grade 6, SE pp.86-87 and pp.158-161. The material demonstrates the application of science in the development of engineering and technology.

## Criteria Category 2: Program Organization

The organization and features of the instructional materials support instruction and learning of the CA NGSS.

**Citations:**

* Criterion #2.2: Grade 4, TE p.23a and Grade 3, TE p.15b. The materials contain teacher questions around a phenomenon to help students make sense.
* Criterion #2.4: Grade 5, TE p.91b, Teach the Dimensions. The material provides support to engage students in three-dimensional learning.
* Criterion #2.6: Grade 2, TE pp.T32-T44 and Grade 3, TE pp.T32-T47. The materials show the organization of content and provide all students an opportunity to achieve skills and knowledge.
* Criterion #2.14: Grade 1, TE pp.137a-137b. The material provides self-assessment for students as a culminating end of unit activity.

## Criteria Category 3: Assessment

The program includes multiple models of both formative and summative assessment tasks for measuring what students know and are able to do and provides guidance for teachers on how to use scoring rubrics and interpret assessment results to guide instruction.

**Citations:**

* Criterion #3.1: Grade K, Assessment Handbook, pp.36-58. The material shows that assessments stress performance tasks rather than rote memorization.
* Criterion #3.3: Grade 6, TE p.13b, p.23, p.121b. The material has formative assessment questions that support three-dimensional learning.
* Criterion #3.4: Grade 2, Assessment Handbook, pp.3-6. The material provides a brief formative assessment to elicit current understandings and preconceptions to provide evidence of student progress toward mastering three-dimensional learning of the CA NGSS and CA Science Framework.
* Criterion #3.7: Grade 4, Assessment Handbook, pp.58-60. The material provides rubrics with a scaled score of 0-3 to score student work.
* Criterion #3.9: Grade 5, Assessment Handbook, pp.52-86. The material provides resources that include student work expectations and analytical rubrics for scoring.

## Criteria Category 4: Access and Equity

Program materials ensure universal and equitable access to high-quality curriculum and instruction for all students and provides teachers with suggestions for differentiation for students with special needs.

**Citations:**

* Criterion #4.1: Grade 3, TE p.93c. The material provides specific instructional connections for differentiated instruction tailored specifically for challenges or opportunities that might arise for specific populations.
* Criterion #4.2: Grade 5, TE p.105a and Grade 1, TE pp.T10-T15. The material includes research based strategies to address the needs of English Language Learners consistent with the CA ELD standards.
* Criterion #4.3: Grade 4, TE p.17a. The material incorporates instructional strategies to address the needs of students with disabilities.
* Criterion #4.4: Grade 6, TE p.29b, p.155b, p.95b. The material provides strategies for working with a diverse group of students.

## Criteria Category 5: Instructional Planning and Support

The instructional materials provide coherent guidelines for teachers to follow when planning three-dimensional instruction and are designed to help teachers provide effective standards-based instruction.

**Citations:**

* Criterion #5.1: Grade 6, TE pp.9a-9b and pp.89a-89c. The material provides pacing guides for instructional units.
* Criterion #5.2: Grade 3, TE pp.167a-167c. The material provides estimated instructional time with resources for implementation of SEPs and engineering design projects.
* Criterion #5.11: Grade 4, TE pp.113a-113b and Grade 2, TE p.45b. The materials connect to and support the goals of the CA CCSS for Math and English Language Arts.
* Criterion #5.15: Grade K, TE Life Science, p.11a and Grade 3, TE p.143a. The materials show examples of the program providing background information on diverse people.

## Edits and Corrections:

The following edits and corrections must be made as a condition of adoption:

| # | Grade Level | Component | Page Number(s) | Current Text | Proposed Corrected Text | Reason for Edit |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | K | Assessment Handbook | 30 | Which is a push?   1. Opening a window 2. Closing a window | Provide an image to clarify if window opens side to side, out, up, crank, button etc. | Imprecise definition |

## Social Content Citations:

No social content violations were noted by the panel.

California Department of Education, August 2018