

SCIENCE/LITERACY UNIT BLUEPRINT Focus: _____

KNOWLEDGE: Core Ideas and Information

WHAT GENERALIZATIONS AND KINDS OF KNOWLEDGE WILL STUDENTS DEVELOP?

- __12A. how living things function, adapt and change.
- __12B. how living things interact with each other and with their environment.
- __12C. properties of matter and energy and the interactions between them.
- __12 D. force and motion and the principles that explain them.
- __12E. features and processes of the Earth and its resources.
- __12F. composition and structure of the universe and Earth's place in it.

CROSS-CUTTING CONCEPTS OF SCIENCE [Link to New Science Standards](#)

Patterns Cause and effect Mechanism and explanation Scale, proportion, and quantity Structure and function
Systems and system models Energy and matter: Flows, cycles, and conservation Stability and change

Construct BIG ideas and questions based on the science standard and cross-cutting concepts.

BIG Ideas (also called "enduring understandings")	BIG (Essential) Questions

INTEGRATED LITERACY DEVELOPMENT: Anchor Reading Standards

__CCSSR1 **Read closely** to determine what the text says **explicitly** and to make **logical inferences** from it; **cite specific textual evidence** when writing or speaking to **support conclusions drawn from the text**.

__CCSSR2. **Determine central ideas** or themes of a text and analyze their development; **summarize the key supporting details and ideas**.

__CCSSR7 **Integrate** and **evaluate** content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Insert CCSS Reading Standards from your grade level—click here to link to them:

[K](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9-10](#) [11-12](#)

Standards-Aligned Reading Skills Development: Students will increase ability to...

- __infer word meaning
- __summarize
- __synthesize
- __report learning
- __construct response
- __compare and contrast
- __identify and cite evidence to support an idea or position
- __interpret visuals
- __identify and use text structure
- __analyze/infer causes/effects
- __preview passage/survey
- __classify
- __summarize
- __synthesize
- __compare /contrast
- __sequence
- __analyze/infer cause-effect relations
- __evaluate relevance
- __determine main ideas and central idea

INTEGRATED WRITING DEVELOPMENT: Write to Learn More

Recommended--Anchor Writing Standard 2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the through the selection, organization, and analysis of relevant content *The explanatory writing standard is recommended because students need to use the concepts and vocabulary they learn to communicate their new knowledge.*

What formats will students complete so that they “think on paper” about the reading and develop communication abilities?

journals, notes, learning reports

lab reports

report on a science topic, question, or issue

CCSSW1. Write **arguments** to **support claims** in an analysis of substantive topics or texts using **valid reasoning** and relevant and sufficient **evidence**.

CCSSW2. Write **informative/explanatory** texts to **examine and convey complex ideas** and information clearly and accurately through the **effective selection, organization, and analysis of content**.

CCSSW3 Write **narratives** to develop real or imagined experiences or events **using effective technique, well-chosen details, and well-structured event sequences**.

Click here for CCSS Writing Standards for your grade:

[K](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9-10](#) [11-12](#)

LEARNING ASSESSMENT

Formative Assessments to identify student progress and needs on a daily and/or weekly basis.

make glossary daily journal write with academic vocabulary

learning report weekly summary student-written questions and answers

graphic organizer illustrate text constructed response

respond to questions with evidence student demonstrates

Summative Assessment At completion of unit, student will demonstrate independent competence in the following product(s):

written report presentation display booklet illustrated guide

demonstration data analysis with explanation based on text and experiments
