

TEACHER'S GUIDE - EIGHTH GRADE RELEVANT ARIZONA STATE STANDARDS

RELEVANT ARIZONA STATE STANDARDS

Reading

Strand 1: Reading Process

Concept 4: Vocabulary

PO2: Use context to identify the intended meaning of unfamiliar words.

PO3: Use context to identify the meaning of words with multiple meanings.

Strand 3: Comprehending Informational Text

Concept 1: Expository Text

PO8: Interpret graphic features of expository text.

Concept 2: Functional Text

PO1: Use information from text and text features to determine the sequence of activities needed to carry out a procedure.

Writing

Strand 1: Writing Process

Concept 1: Prewriting

PO2: Determine the purpose of an intended writing piece.

PO3: Determine the intended audience of a writing piece.

Concept 2: Drafting

PO2: Organize writing into a logical sequence that is clear to the audience.

Concept 5: Publishing

PO1: Prepare writing in a format appropriate to audience and purpose.

PO3: Use graphics when applicable to enhance the final product.

Strand 2: Writing Components

Concept 1: Ideas and Content

PO1: Use clear, focused ideas and details to support the topic.

PO2: Provide content and selected details that are well suited to audience and purpose.

PO3: Develop a sufficient explanation or exploration of the topic

PO4: Include ideas and details that show original perspective.

continued

Strand 3: Writing Applications

Concept 1: Expressive

PO2: Write in a variety of expressive forms that according to mode, employ:

- a. Figurative language
- b. Rhythm
- c. Dialogue
- d. Characterization
- e. Plot
- f. Appropriate format

Concept 2: Expository

PO1: Record information related to the topic.

Concept 3: Functional

PO1: Write a variety of functional texts

Concept 6: Research

PO2: Write an informational report that includes: a focused topic, appropriate facts and relevant details, a logical sequence, a concluding statement, a list of sources used.

Language Arts

Standard 3: Listening and Speaking

LS-E3: Interpret and respond to questions and evaluate responses both as interviewer and interviewee.

Math

Strand 1: Number and Operations

Concept 2: Numerical Operations

PO3: Solve problems involving percent increase, percent decrease, and simple interest rates.

Strand 1: Data Analysis, Probability, and Discrete Mathematics

Concept 2: Probability

PO2: Interpret probabilities within a given context and compare the outcome of an experiment to predictions made prior to performing the experiment.

Science

Strand 1: Inquiry Process

Concept 1: Observations, Questions, and Hypotheses

PO1: Formulate questions based on observations that lead to the development of a hypothesis

PO2: Use appropriate research information, not limited to a single source, to use in the development of a testable hypothesis.

PO3: Generate a hypothesis that can be tested.

Concept 2: Scientific Testing

PO1: Demonstrate safe behavior and appropriate procedures in all science inquiry.

PO2: Design an investigation to test individual variables using scientific processes.

PO3: Conduct a controlled investigation, utilizing multiple trials, to test a hypothesis using scientific processes.

PO4: Perform measurements using appropriate scientific tools.

PO5: Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.

Concept 3: Analysis and Conclusions

PO1: Analyze data obtained in a scientific investigation to identify trends.

PO2: Form a logical argument about a correlation between variables or sequence of events.

PO3: Interpret data that show a variety of possible relationships between two variables including: positive relationship and negative relationship.

PO4: Formulate a future investigation based on the data collected.

PO5: Explain how evidence supports the validity and reliability of a conclusion.

PO8: Formulate new questions based on the results of a previous investigation.

Concept 4: Communication

PO1: Communicate the results of an investigation.

PO3: Present analyses and conclusions in clear, concise formats.

PO4: Write clear, step-by-step instructions for conducting investigations or operating equipment

PO5: Communicate the results and conclusion of the investigation.

TEACHER'S GUIDE - EIGHTH GRADE RELEVANT ARIZONA STATE STANDARDS

Strand 3: Science in Personal and Social Perspectives

Concept 2: Science and Technology in Society

PO1: Propose to viable methods of responding to an identified need or problem.

Strand 4: Life Science

Concept 2: Reproduction and Heredity

PO2: Explain the basic principles of heredity using the human examples of eye color, widow's peak, and blood type.

PO3: Distinguish between the nature of dominant and recessive traits in humans.

Concept 4: Diversity, Adaptation, and Behavior

PO1: Explain how an organism's behavior allows it to survive in an environment.

PO2: Describe how an organism can maintain a stable internal environment while living in a constantly changing external environment.

PO3: Determine characteristics of organisms that could change over several generations.

PO5: Analyze the following behavioral cycles of organisms:

- Hibernation
- Migration
- Dormancy (plants)

PO6: Describe the following factors that allow for the survival of living organisms: pollination.

Educational Technology

Strand 1: Creativity and Innovation

Concept 4: Original Works

PO2: Use digital tools to collaborate with a group to communicate original ideas, products, or projects effectively in a creative or innovative style.

Strand 2: Communication and Collaboration

Concept 1: Effective Communications and Digital Interactions

PO1: Collaborate and communicate with peers, experts, or others employing a variety of digital tools to share findings and/or publish.

continued

Strand 3: Research and Information Literacy

Concept 2: Processing

- PO1: Locate and synthesize information utilizing advanced search strategies.
- PO2: Evaluate and use authoritative primary and secondary sources.
- PO3: Evaluate between fact and opinion, bias, inaccurate and misleading information by consulting multiple sources.
- PO4: Synthesize research information to create new understanding.

Strand 6: Technology Operations and Concepts

Concept 2: Applications

- PO7: Identify and use network protocols for moving files and secure web access.

Workplace Skills

Standard IWP-E4: Respond to oral and written presentations by formulating relevant feedback, expressing opinions, discerning the main idea and distinguishing fact from opinion.

- PO1: Summarize main ideas of an oral or written presentation.
- PO3: Formulate related questions in a presentation.
- PO4: Express opinions relating to the main idea in a presentation.