



## ▶ STATE STANDARDS CORRELATION

- ▶ State: Texas
- ▶ Grade Levels: Grades 3-5
- ▶ Content Areas: English Language Arts & Reading, Science & Mathematics

For a complete list of Texas Essential Knowledge and Skills (TEKS), please visit <http://www.tea.state.tx.us/index2.aspx?id=6148> or contact the Texas Education Agency's Division of Curriculum.

### ENGLISH LANGUAGE ARTS & READING

#### *Grade 3*

- (2) **Reading/Beginning Reading/Strategies.** Students comprehend a variety of texts drawing on useful strategies as needed. Students are expected to:
  - (A) use ideas (e.g., illustrations, titles, topic sentences, key words, and foreshadowing clues) to make and confirm predictions
- (14) **Reading/Comprehension of Informational Text/Persuasive Text.** Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to identify what the author is trying to persuade the reader to think or do.
- (15) **Reading/Comprehension of Informational Text/Procedural Texts.** Students understand how to glean and use information in procedural texts and documents. Students are expected to:
  - (A) follow and explain a set of written multi-step directions; and
  - (B) locate and use specific information in graphic features of text.
- (17) **Writing/Writing Process.** Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
  - (E) publish written work for a specific audience.
- (19) **Writing.** Students write about their own experiences. Students are expected to write about important personal experiences.
- (21) **Writing/Persuasive Texts.** Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive essays for appropriate audiences that establish a position and use supporting details.
- (26) **Research/Gathering Sources.** Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
  - (A) follow the research plan to collect information from multiple sources of information, both oral and written, including:

- (i) student-initiated surveys, on-site inspections, and interviews;
  - (ii) data from experts, reference texts, and online searches; and
  - (iii) visual sources of information (e.g., maps, timelines, graphs) where appropriate;
- (27) **Research/Synthesizing Information.** Students clarify research questions and evaluate and synthesize collected information. Students are expected to improve the focus of research as a result of consulting expert sources (e.g., reference librarians and local experts on the topic).
- (28) **Research/Organizing and Presenting Ideas.** Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to draw conclusions through a brief written explanation and create a works-cited page from notes, including the author, title, publisher, and publication year for each source used.
- (31) **Listening and Speaking/Teamwork.** Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to participate in teacher- and student-led discussions by posing and answering questions with appropriate detail and by providing suggestions that build upon the ideas of others.

#### *Grade 4*

- (2) **Reading/Vocabulary Development.** Students understand new vocabulary and use it when reading and writing. Students are expected to:
- (B) use the context of the sentence (e.g., in-sentence example or definition) to determine the meaning of unfamiliar words or multiple meaning words;
- (15) **Writing/Writing Process.** Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (E) revise final draft in response to feedback from peers and teacher and publish written work for a specific audience.
- (19) **Writing/Persuasive Texts.** Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive essays for appropriate audiences that establish a position and use supporting details.
- (23) **Research/Research Plan.** Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
- (A) generate research topics from personal interests or by brainstorming with others, narrow to one topic, and formulate open-ended questions about the major research topic; and
  - (B) generate a research plan for gathering relevant information (e.g., surveys, interviews, encyclopedias) about the major research question.
- (24) **Research/Gathering Sources.** Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to collect information from multiple sources of information both oral and written, including:
    - (i) student-initiated surveys, on-site inspections, and interviews;
    - (ii) data from experts, reference texts, and online searches; and
    - (iii) visual sources of information (e.g., maps, timelines, graphs) where appropriate;
  - (C) take simple notes and sort evidence into provided categories or an organizer;
- (26) **Research/Organizing and Presenting Ideas.** Students organize and present their ideas and information according to the purpose of the research and their audience. Students are

expected to draw conclusions through a brief written explanation and create a works-cited page from notes, including the author, title, publisher, and publication year for each source used.

(27) Listening and Speaking/Listening. Students use comprehension skills to listen attentively to others in formal and informal settings. Students continue to apply earlier standards with greater complexity. Students are expected to:

(A) listen attentively to speakers, ask relevant questions, and make pertinent comments; and

(29) Listening and Speaking/Teamwork. Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to participate in teacher- and student-led discussions by posing and answering questions with appropriate detail and by providing suggestions that build upon the ideas of others.

### *Grade 5*

(2) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:

(B) use context (e.g., in-sentence restatement) to determine or clarify the meaning of unfamiliar or multiple meaning words;

(15) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:

(E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.

(19) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive essays for appropriate audiences that establish a position and include sound reasoning, detailed and relevant evidence, and consideration of alternatives.

(23) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

(A) brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic; and

(B) generate a research plan for gathering relevant information about the major research question.

(26) Research/Organize and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into a written or an oral presentation that:

(A) compiles important information from multiple sources;

(27) Listening and Speaking/Listening. Students use comprehension skills to listen attentively to others in formal and informal settings. Students continue to apply earlier standards with greater complexity. Students are expected to:

(A) listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose or perspective;

(29) Listening and Speaking/Teamwork. Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement.

## **SCIENCE**

### *Grade 3*

(1) Scientific processes. The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and

ethical practices. The student is expected to:

- (B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.
- (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:
  - (B) collect information by observing and measuring;
  - (C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;
  - (D) communicate valid conclusions; and
  - (E) construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.
- (4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:
  - (A) collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets
- (8) Science concepts. The student knows that living organisms need food, water, light, air, a way to dispose of waste, and an environment in which to live.
  - (A) observe and describe the habitats of organisms within an ecosystem;

#### *Grade 4*

- (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:
  - (A) plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology;
  - (B) collect information by observing and measuring;
  - (C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;
  - (D) communicate valid conclusions
  - (E) construct simple graphs, tables, maps, and charts to organize, examine, and evaluate information.
- (4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:
  - (A) collect and analyze information using tools including calculators, safety goggles, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, meter sticks, timing devices, balances, and compasses; and
- (5) Science concepts. The student knows that complex systems may not work if some parts are removed. The student is expected to:
  - (B) predict and draw conclusions about what happens when part of a system is removed.
- (11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:
  - (C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle.

#### *Grade 5*

- (1) Scientific processes. The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to:
- (B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.
- (2) Scientific processes. The student uses scientific methods during field and laboratory investigations. The student is expected to:
- (B) collect information by observing and measuring;
  - (C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;
  - (C) communicate valid conclusions; and
- (4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:
- (A) collect and analyze information using tools including calculators, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collecting nets, and safety goggles; and
- (5) Science concepts. The student knows that a system is a collection of cycles, structures, and processes that interact. The student is expected to:
- (A) describe some cycles, structures, and processes that are found in a simple system; and
  - (B) describe some interactions that occur in a simple system.
- (6) Science concepts. The student knows that some change occurs in cycles. The student is expected to:
- (B) identify the significance of the water, carbon, and nitrogen cycles; and
- (8) Science concepts. The student knows that energy occurs in many forms. The student is expected to:
- (A) differentiate among forms of energy including light, heat, electrical, and solar energy;
- (12) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:
- (B) describe processes responsible for the formation of coal, oil, gas, and minerals;

## MATHEMATICS

### *Grade 3*

- (3.3) **Number, operation, and quantitative reasoning.** The student adds and subtracts to solve meaningful problems involving whole numbers.
- (3.6) **Patterns, relationships, and algebraic thinking.** The student uses patterns to solve problems. The student is expected to:
- (A) identify and extend whole-number and geometric patterns to make predictions and solve problems;
- (3.7) **Patterns, relationships, and algebraic thinking.** The student uses lists, tables, and charts to express patterns and relationships.
- (3.11) **Measurement.** The student directly compares the attributes of length, area, weight/mass, and capacity, and uses comparative language to solve problems and answer questions. The student selects and uses standard units to describe length, area, capacity/volume, and weight/mass.
- (3.13) **Probability and statistics.** The student solves problems by collecting, organizing,

displaying, and interpreting sets of data.

(3.14) **Underlying processes and mathematical tools.** The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;

(C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and

(3.15) **Underlying processes and mathematical tools.** The student communicates about Grade 3 mathematics using informal language. The student is expected to:

(A) explain and record observations using objects, words, pictures, numbers, and technology; and

#### *Grade 4*

(4.3) **Number, operation, and quantitative reasoning.** The student adds and subtracts to solve meaningful problems involving whole numbers and decimals.

(4.14) **Underlying processes and mathematical tools.** The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(A) identify the mathematics in everyday situations;

(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;

(C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting

(D) use tools such as real objects, manipulatives, and technology to solve problems.

(4.15) **Underlying processes and mathematical tools.** The student communicates about Grade 4 mathematics using informal language. The student is expected to:

(A) explain and record observations using objects, words, pictures, numbers, and technology

#### *Grade 5*

(5.3) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve meaningful problems.

(5.5) **Patterns, relationships, and algebraic thinking.** The student makes generalizations based on observed patterns and relationships.

(5.10) **Measurement.** The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems.

(5.14) **Underlying processes and mathematical tools.** The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(A) identify the mathematics in everyday situations;

(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;

(C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and

(D) use tools such as real objects, manipulatives, and technology to solve

problems.

(5.15) **Underlying processes and mathematical tools.** The student communicates about Grade 5 mathematics using informal language. The student is expected to:

(A) explain and record observations using objects, words, pictures, numbers, and technology; and

Audubon Adventures Issue	English Language Arts & Reading	Science	Mathematics
<b>At Home in a Habitat</b>			
Student Newspaper	3.2.A, 3.14, 3.15.B, 26.A.iii, 4.2.B, 5.2.B	3.1.B, 3.2.C, 3.4.A, 4.4.A, 5.1.B, 5.4.A	3.3.7, 5.5.5
Classroom Resource Manual:			
Field Activity: <i>Wild in the Schoolyard</i> (page 15)	3.15.A, 3.15.B, 3.17.E, 3.26.A.ii, 3.26.A.iii, 3.28, 3.31, 4.23.B, 4.24.A.ii, 4.24.A.iii, 4.26, 4.29, 5.23.B, 5.26, 5.29	3.4.A, 4.2.E, 4.4.A, 5.4.A	3.3.13, 3.3.14, 4.4.14.B, 4.4.14.D, 5.5.14.B, 5.5.14.D
Hands-On Activity: <i>Help the Local Habitat: Build a Bird Feeder</i> (page 16)	3.15.A, 3.31, 4.29, 5.29	3.1.B, 5.1.B	3.3.13, 3.3.14.B, 4.4.14.B, 5.5.14.B
Hands-On Activity: <i>Garbage In, Compost Out!</i> (page 16)	3.15.A, 3.21, 26.A.ii, 3.27, 3.28, 3.31, 4.19, 4.24.A.ii, 4.26, 4.29, 5.19, 5.26, 5.29	3.1.B, 3.4.A, 4.4.A, 5.1.B, 5.4.A, 5.5.A, 5.12.B	3.3.14.B, 4.4.14.B, 5.5.14.B
<i>Find Out More Essay</i> (page 18)	3.15.B, 4.2.B, 5.2.B	3.2.C, 3.4.A, 3.8.A, 4.2.C, 4.4.A, 5.2.C, 5.4.A	3.3.3, 3.3.6.A, 3.3.7, 4.4.3, 4.4.14.A, 5.5.3, 5.5.5, 5.5.14.A
<b>Caretaking our World's Water</b>			
Student Newspaper	3.14, 3.15.B, 4.2.B, 5.2.B,	3.1.B, 3.2.C, 4.2.C, 4.5.B, 5.1.B, 5.2.C, 5.6.B	3.3.3, 3.3.7, 3.3.11, 4.4.3, 4.4.14.A, 5.5.3, 5.5.10, 5.5.14.A
Classroom Resource Manual:			
Field Activity: <i>School Water Audit</i> (page 24)	3.17.E, 3.21, 3.26.A.i, 3.28, 3.31, 4.24.A.i, 4.24.C, 4.26, 4.29, 5.19, 5.23.B, 5.26, 5.29	3.1.B, 3.2.B, 3.2.D, 3.2.E, 3.4.A, 4.2.B, 4.2.D, 4.2.E, 4.4.A, 4.11.C, 5.1.B, 5.2.B, 5.2.C, 5.4.A, 5.6.B,	3.3.3, 3.3.11, 3.3.13, 4.4.3, 4.4.14.A, 5.5.3, 5.5.10, 5.5.14.A
Hands-On Activity: <i>Where's Our Water From?</i> (page 26)	3.2.A, 3.15.B, 3.26.A.ii, 3.26.A.iii, 3.31, 4.24.A.ii, 4.24.A.iii, 4.29, 5.26.A, 5.29	3.1.B, 3.2.C, 3.2.D, 3.2.E, 3.4.A, 4.2.C, 4.2.D, 4.2.E, 4.4.A, 5.1.B, 5.2.C, 5.2.D, 5.4.A	3.3.7
Hands-On Activity: <i>Map Your Watershed</i> (page 26)	3.15.B, 3.21, 3.26.A.ii, 3.26.A.iii, 3.28, 3.31, 4.19, 4.24.A.ii, 4.24.A.iii, 4.26, 4.29, 5.19, 5.26.A, 5.29	3.2.D, 3.2.E, 3.4.A, 4.2.D, 4.2.E, 4.4.A, 5.2.D, 5.4.A,	3.3.7
<i>Find Out More Essay</i> (page 27)	3.14, 4.2.B, 5.2.B	3.1.B, 4.5.B, 4.11.C, 5.1.B, 5.5.A, 5.5.B, 5.6.B,	4.4.14.A, 5.5.14.A
<b>Power from the Planet</b>			
Student Newspaper	3.14, 3.15.B, 3.26.A.ii, 4.2.B, 4.24.A.ii, 5.2.B	3.1.B, 3.4.A, 3.8.A, 4.4.A, 4.5.B, 4.11.C, 5.1.B, 5.4.A, 5.6.B, 5.8.A, 5.12.B	3.3.13, 3.3.15.A, 4.4.14.A, 4.4.14.D, 4.4.15.A, 5.5.14.A, 5.5.15.A, 5.5.14.D
Classroom Resource Manual:			
Hands-On Activity: <i>Energy Challenge</i> (page 33)	3.2.A, 3.15.B, 3.17.E, 3.21, 3.26.A.i, 3.26.A.ii, 3.26.A.iii, 3.27, 3.28, 3.31,	3.1.B, 3.2.D, 3.2.E, 3.4.A, 4.2.D, 4.2.E, 4.4.A, 5.1.B,	3.3.15.A, 4.4.15.A, 5.5.15.A

	4.15.E, 4.19, 4.24.A.i, 4.24.A.ii, 4.24.A.iii, 4.26, 4.27.A, 4.29, 5.15.E, 5.19, 5.26.A, 5.29,	5.2.D, 5.4.A,	
Hands-On Activity: <i>Trashology</i> (page 33)	3.26.A.i, 3.31, 4.24.A.i, 4.29, 5.29	3.1.B, 3.2.B, 3.2.C, 3.2.D, 3.2.E, 4.2.B, 4.2.C, 4.2.D, 4.2.E, 5.1.B, 5.2.B, 5.2.C, 5.2.D	Division 3.3.3, 3.3.7, 3.3.11, 3.3.13, 3.3.14.B, 4.4.3, 4.4.14.A, 4.4.14.B, 4.4.15.A, 5.5.3, 5.5.10, 5.5.14.A, 5.5.14.B, 5.5.15.A
Field Activity: <i>Energy Check</i> (page 34)	3.19, 3.26.A.i, 3.26.A.ii, 3.27, 3.31, 4.24.A.i, 4.24.A.ii, 4.24.C, 4.27.A, 4.29, 5.26.A, 5.27.A, 5.29	3.1.B, 3.2.B, 3.2.C, 3.2.D, 3.2.E, 3.4.A, 4.2.B, 4.2.C, 4.2.D, 4.2.E, 4.4.A, 5.1.B, 5.2.B, 5.2.C, 5.2.D, 5.4.A,	3.3.7, 3.3.13, 3.3.14.B, 3.3.15.A, 4.4.14.B, 4.4.15.A, 5.5.5, 5.5.14.B, 5.5.15.A
<i>Find Out More Essay</i> (page 36)	3.14, 4.2.B, 5.2.B	3.1.B, 4.5.B, 4.11.C, 5.1.B, 5.5.A, 5.8.A	4.4.14.A, 5.5.14.A