

OKLAHOMA ACADEMIC STANDARDS

ENGLISH LANGUAGE ARTS



OKLAHOMA STATE DEPARTMENT OF
EDUCATION
— CHAMPION EXCELLENCE —

Instructional Design Considerations

EIGHT CONSISTENT STANDARDS

The standards were developed with consideration to teachers and curriculum designers. **Rich units of study can be designed by incorporating each of the eight overarching standards.** Further grade-specific guidance is provided in the Reading and Writing strands.

READING and WRITING STRANDS

The standards were designed to develop the total literacy of students by intentionally taking into consideration what they do when reading and writing. **Every standard includes a reading and writing strand with standard objectives delineated by grade-level.**

Reading instruction supports the development and refinement of writing skills. Writing instruction supports the development and refinement of reading skills.



RECURSIVE TEACHING and LEARNING

Teaching and learning language arts is a recursive endeavor: students will revisit concepts again and again as they use language at increasingly sophisticated levels. **Skills are repeated with an implied expectation that they are attributed to increasingly more complex texts.**

Because of this recursive learning process, language arts learning does not progress for students in a strictly linear way.

Oklahoma ELA standards are not taught in isolation. Standards can be bundled for educators to develop grade-appropriate lessons, tasks, and assessments.

Standard 1: Speaking and Listening

Students will speak and listen effectively in a variety of situations including, but not limited to, responses to reading and writing.

Reading

Students will develop and apply effective communication skills through speaking and active listening.

- 3.1.R.1 Students will actively listen and speak clearly using appropriate discussion rules.
- 3.1.R.2 Students will ask and answer questions to seek help, get information, or clarify about information presented orally through text or other media to confirm understanding.
- 3.1.R.3 Students will engage in collaborative discussions about appropriate topics and texts, expressing their own ideas clearly in pairs, diverse groups, and whole class settings.

Writing

Students will develop and apply effective communication skills through speaking and active listening to create individual and group projects and presentations.

- 3.1.W.1 Students will report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences at an appropriate pace.
- 3.1.W.2 Students will work respectfully within diverse groups, share responsibility for collaborative work, and value individual contributions made by each group member.

Standard 2: Reading Foundations

Students will develop foundational skills for future reading success by working with sounds, letters, and text.

Phonological Awareness

Phonological awareness is the ability to recognize, think about, and manipulate sounds in spoken language without using text.

Students will continue to review and apply earlier grade level expectations for this standard. If phonological awareness skills are not mastered, students will address skills from previous grades.

Print Concepts

Students will demonstrate their understanding of the organization and basic features of print, including book handling skills and the understanding that printed materials provide information and tell stories.

3.2.PC Students will correctly form letters in print and cursive and use appropriate spacing for letters, words, and sentences.

Students will continue to review and apply earlier grade level expectations for this standard. If print concepts skills are not mastered, students will address skills from previous grades.

Phonics and Word Study

Students will decode and read words in context and isolation by applying phonics and word analysis skills.

3.2.PWS.1 Students will decode multisyllabic words using their knowledge of:

- “r” controlled vowels (e.g., *ar, er, ir or, ur*)
- vowel diphthongs (*vowel combinations having two vowel sounds e.g., oi as in boil, oy as in boy*)

3.2.PWS.2 Students will decode multisyllabic words by applying knowledge of structural analysis:

- all major syllable patterns
- contractions
- abbreviations
- common roots and related prefixes and suffixes

3.2.PWS.3 Students will use decoding skills and semantics in context when reading new words in a text, including multisyllabic words.

Students will continue to review and apply earlier grade level expectations for this standard. If these decoding skills are not mastered, students will address skills from previous grades.

Fluency

Students will recognize high- frequency words and read grade-level text smoothly and accurately, with expression that connotes comprehension.

3.2.F.1 Students will read high frequency and irregularly spelled grade-level words with automaticity in text.

3.2.F.2 Students will orally read grade-level text at an appropriate rate, smoothly and accurately, with expression that connotes comprehension.

Students will continue to review and apply earlier grade level expectations for this standard. If these fluency skills are not mastered, students will address skills from previous grades.

Standard 2: Reading and Writing Process

Students will use a variety of recursive reading and writing processes.

Reading

Students will read and comprehend increasingly complex literary and informational texts.

- 3.2.R.1 Students will locate the main idea and key supporting details of a text or section of text.
- 3.2.R.2 Students will compare and contrast details (*e.g., plots or events, settings, and characters*) to discriminate genres.
- 3.2.R.3 Students will summarize events or plots (*i.e., beginning, middle, end, and conflict*) of a story or text.

Writing

Students will develop and strengthen writing by engaging in a recursive process that includes prewriting, drafting, revising, editing, and publishing.

- 3.2.W.1 Students will develop drafts by categorizing ideas and organizing them into paragraphs using correct paragraph indentations.
- 3.2.W.2 Students will edit drafts and revise for clarity and organization.
- 3.2.W.3 Students will correctly spell grade-appropriate words while editing.
- 3.2.W.4 Students will use resources to find correct spellings of words (*e.g., word wall, vocabulary notebook, print and electronic dictionaries*).

Standard 3: Critical Reading and Writing

Students will apply critical thinking skills to reading and writing.

Reading	Writing
Students will comprehend, interpret, evaluate, and respond to a variety of complex texts of all literary and informational genres from a variety of historical, cultural, ethnic, and global perspectives.	Students will write for varied purposes and audiences in all modes, using fully developed ideas, strong organization, well-chosen words, fluent sentences, and appropriate voice.
3.3.R.1 Students determine the author's stated and implied purpose (<i>i.e., entertain, inform, persuade</i>).	3.3.W.1 NARRATIVE – Grade Level Focus Students will write narratives incorporating characters, plot, setting, point of view, and conflict (<i>i.e., solution and resolution</i>).
3.3.R.2 Students will infer whether a story is narrated in first or third person point of view in grade-level literary and/or informational text.	3.3.W.2 INFORMATIVE Students will write facts about a subject, including a main idea with supporting details, and use transitional and signal words.
3.3.R.3 Students will find textual evidence when provided with examples of literary elements and organization: <ul style="list-style-type: none"> • setting (<i>i.e., time, place</i>) • plot • characters • characterization • theme 	3.3.W.3 OPINION Students will express an opinion about a topic and provide reasons as support.
3.3.R.4 Students will find examples of literary devices: <ul style="list-style-type: none"> • simile • metaphor • personification • onomatopoeia • hyperbole 	
3.3.R.5 Students will distinguish fact from opinion in a text.	
3.3.R.6 Students will describe the structure of a text (<i>e.g., description, compare/contrast, sequential, problem/solution, cause/effect</i>) with guidance and support.	
3.3.R.7 Students will ask and answer inferential questions using the text to support answers with guidance and support.	

Standard 4: Vocabulary

Students will expand their working vocabularies to effectively communicate and understand texts.

Reading		Writing	
Students will expand academic, domain-appropriate, grade-level vocabularies through reading, word study, and class discussion.		Students will apply knowledge of vocabularies to communicate by using descriptive, academic, and domain-appropriate abstract and concrete words in their writing.	
3.4.R.1	Students will increase knowledge of academic, domain-appropriate, grade-level vocabulary to infer meaning of grade-level text.	3.4.W.1	Students will use domain-appropriate vocabulary to communicate ideas in writing.
3.4.R.2	Students will use word parts (<i>e.g.</i> , <i>affixes</i> , <i>roots</i> , <i>stems</i>) to define and determine the meaning of new words.	3.4.W.2	Students will select appropriate language according to purpose in writing.
3.4.R.3	Students will use context clues to determine the meaning of words or distinguish among multiple-meaning words.		
3.4.R.4	Students will infer relationships among words, including synonyms, antonyms, homographs, and homonyms.		
3.4.R.5	Students will use a dictionary or glossary (<i>print and/or electronic</i>) to determine or clarify the meanings, syllabication, and pronunciation of words.		

Standard 5: Language

Students will apply knowledge of grammar and rhetorical style to reading and writing.

Reading		Writing	
Students will apply knowledge of grammar and rhetorical style to analyze and evaluate a variety of texts.		Students will demonstrate command of Standard English grammar, mechanics, and usage through writing and other modes of communication.	
3.5.R.1	Students will recognize pronouns and possessive nouns.	3.5.W.1	Students will capitalize and appropriately punctuate: <ul style="list-style-type: none"> titles of respect appropriate words in titles geographical names
3.5.R.2	Students will recognize irregular and past participle verbs and	3.5.W.2	Students will use complex contractions (<i>e.g.</i> , <i>should've</i> , <i>won't</i>).

	verb tense to identify settings, times, and sequences in text.		
3.5.R.3	Students will recognize adjectives, articles as adjectives, and adverbs.	3.5.W.3	Students will compose and expand grammatically correct sentences and questions with appropriate commas, apostrophes, quotation marks, and end marks as needed for dialogue.
3.5.R.4	Students will recognize prepositions and conjunctions.	3.5.W.4	Students will compose simple, compound and complex declarative, interrogative, imperative, and exclamatory sentences.
3.5.R.5	Students will recognize the subject and verb agreement.		

Standard 6: Research

Students will engage in inquiry to acquire, refine, and share knowledge.

Reading

Students will comprehend, evaluate, and synthesize resources to acquire and refine knowledge.

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| 3.6.R.1 | Students will use their own questions to find information on their topic. |
| 3.6.R.2 | Students will use graphic features including photos, illustrations, captions, titles, labels, headings, subheadings, italics, sidebars, charts, graphs, and legends to define a text. |
| 3.6.R.3 | Students will locate information in visual and text reference sources, electronic resources, and/or interviews. |
| 3.6.R.4 | Students will determine the relevance and reliability of the information for their specific topic of interest with guidance and support. |

Writing

Students will summarize and paraphrase, integrate evidence, and cite sources to create reports, projects, papers, texts, and presentations for multiple purposes.

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| 3.6.W.1 | Students will generate a list of topics of interest and individual questions about one specific topic of interest. |
| 3.6.W.2 | Students will organize information found during group or individual research, using graphic organizers or other aids. |
| 3.6.W.3 | Students will summarize and present information in a report. |

Standard 7: Multimodal Literacies

Students will acquire, refine, and share knowledge through a variety of written, oral, visual, digital, non-verbal, and interactive texts.

Reading

Writing

Students will create multimodal texts to communicate knowledge and develop arguments.

Students will evaluate written, oral, visual, and digital texts in order to draw conclusions and analyze arguments.

3.7.R.1 Students will locate, organize, and use information from a variety of written, oral, visual, digital, non-verbal, and interactive texts to generate and answer literal questions.

3.7.W.1 Students will create multimodal content that communicates an idea using technology or appropriate media.

3.7.R.2 Students will compare how ideas and topics are depicted in a variety of media and formats.

3.7.W.2 Students will create presentations using video, photos, and other multimedia elements to support communication and clarify ideas, thoughts, and feelings.

Standard 8: Independent Reading and Writing

Students will read and write for a variety of purposes including, but not limited to, academic and personal.

Reading

Students will read independently for a variety of purposes and for extended periods of time. Students will select appropriate texts for specific purposes.

Writing

Students will write independently for extended periods of time. Students will vary their modes of expression to suit audience and task.

3.8.R Students will select appropriate texts for specific purposes and read independently for extended periods of time.

3.8.W Students will write independently over extended periods of time (*e.g., time for reflection and revision*) and for shorter timeframes (*e.g., a single sitting or a day or two*) to communicate with different audiences for a variety of purposes.

OKLAHOMA ACADEMIC STANDARDS

MATHEMATICS



OKLAHOMA STATE DEPARTMENT OF
EDUCATION
— CHAMPION EXCELLENCE —



Reading the Oklahoma Academic Standards for Mathematics



Develop a Deep and Flexible Conceptual Understanding	Develop Accurate and Appropriate Procedural Fluency	Develop Strategies for Problem Solving	Develop Mathematical Reasoning	Develop a Productive Mathematical Disposition	Develop the Ability to Make Conjectures, Model, and Generalize	Develop the Ability to Communicate Mathematically
Number & Operations (N)						
5.N.1 Divide multi-digit numbers and solve real-world and mathematical problems using arithmetic.	5.N.1.1 Estimate solutions to division problems in order to assess the reasonableness of results.					
	5.N.1.2 Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.					
	5.N.1.3 Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution.					
	5.N.1.4 Solve real-world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.					
5.N.2 Read, write, represent, and compare fractions and decimals; recognize and write equivalent fractions; convert between fractions and decimals; use fractions and decimals in real-world and mathematical situations.	5.N.2.1 Represent fractions and decimals (e.g., $\frac{1}{10}$, $\frac{1}{100}$) using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make comparisons of fractions and decimals.					
	5.N.2.2 Represent, read and write decimals using place value to describe decimal numbers including fractional numbers as small as thousandths and whole numbers as large as millions.					
	5.N.2.3 Compare and order fractions and decimals, including mixed numbers and fractions less than one, and locate on a number line.					
	5.N.2.4 Recognize and generate equivalent decimals, fractions, mixed numbers, and fractions less than one in various contexts.					
5.N.3 Add and subtract fractions with like and unlike denominators, mixed numbers and decimals to solve real-world and mathematical problems.	5.N.3.1 Estimate sums and differences of fractions with like and unlike denominators, mixed numbers, and decimals to assess the reasonableness of the results.					
	5.N.3.2 Illustrate addition and subtraction of fractions with like and unlike denominators, mixed numbers, and decimals using a variety of representations (e.g., fraction strips, area models, number lines, fraction rods).					
	5.N.3.3 Add and subtract fractions with like and unlike denominators, mixed numbers, and decimals, using efficient and generalizable procedures, including but not limited to standard algorithms in order to solve real-world and mathematical problems including those involving money, measurement, geometry, and data.					
	5.N.3.4 Find 0.1 more than a number and 0.1 less than a number. Find 0.01 more than a number and 0.01 less than a number. Find 0.001 more than a number and 0.001 less than a number.					



Develop a Deep and Flexible Conceptual Understanding	Develop Accurate and Appropriate Procedural Fluency	Develop Strategies for Problem Solving	Develop Mathematical Reasoning	Develop a Productive Mathematical Disposition	Develop the Ability to Make Conjectures, Model, and Generalize	Develop the Ability to Communicate Mathematically
Number & Operations (N)						
3.N.1 Compare and represent whole numbers up to 100,000 with an emphasis on place value and equality.	3.N.1.1 Read, write, discuss, and represent whole numbers up to 100,000. Representations may include numerals, expressions with operations, words, pictures, number lines, and manipulatives.					
	3.N.1.2 Use place value to describe whole numbers between 1,000 and 100,000 in terms of ten thousands, thousands, hundreds, tens and ones, including expanded form.					
	3.N.1.3 Find 10,000 more or 10,000 less than a given five-digit number. Find 1,000 more or 1,000 less than a given four- or five-digit number. Find 100 more or 100 less than a given four- or five-digit number.					
	3.N.1.4 Use place value to compare and order whole numbers up to 100,000, using comparative language, numbers, and symbols.					
3.N.2 Add and subtract multi-digit whole numbers; multiply with factors up to 10; represent multiplication and division in various ways; Solve real-world and mathematical problems through the representation of related operations.	3.N.2.1 Represent multiplication facts by using a variety of approaches, such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line and skip counting.					
	3.N.2.2 Demonstrate fluency of multiplication facts with factors up to 10.					
	3.N.2.3 Use strategies and algorithms based on knowledge of place value and equality to fluently add and subtract multi-digit numbers.					
	3.N.2.4 Recognize when to round numbers and apply understanding to round numbers to the nearest ten thousand, thousand, hundred, and ten and use compatible numbers to estimate sums and differences.					
	3.N.2.5 Use addition and subtraction to solve real-world and mathematical problems involving whole numbers. Use various strategies, including the relationship between addition and subtraction, the use of technology, and the context of the problem to assess the reasonableness of results.					
	3.N.2.6 Represent division facts by using a variety of approaches, such as repeated subtraction, equal sharing and forming equal groups.					
	3.N.2.7 Recognize the relationship between multiplication and division to represent and solve real-world problems.					
	3.N.2.8 Use strategies and algorithms based on knowledge of place value, equality and properties of addition and multiplication to multiply a two-digit number by a one-digit number.					



3.N.3 Understand meanings and uses of fractions in real-world and mathematical situations.	3.N.3.1 Read and write fractions with words and symbols.
	3.N.3.2 Construct fractions using length, set, and area models.
	3.N.3.3 Recognize unit fractions and use them to compose and decompose fractions related to the same whole. Use the numerator to describe the number of parts and the denominator to describe the number of partitions.
	3.N.3.4 Use models and number lines to order and compare fractions that are related to the same whole.
3.N.4 Determine the value of a set of coins or bills.	3.N.4.1 Use addition to determine the value of a collection of coins up to one dollar using the cent symbol and a collection of bills up to twenty dollars.
	3.N.4.2 Select the fewest number of coins for a given amount of money up to one dollar.
Algebraic Reasoning & Algebra (A)	
3.A.1 Describe and create representations of numerical and geometric patterns.	3.A.1.1 Create, describe, and extend patterns involving addition, subtraction, or multiplication to solve problems in a variety of contexts.
	3.A.1.2 Describe the rule (single operation) for a pattern from an input/output table or function machine involving addition, subtraction, or multiplication.
	3.A.1.3 Explore and develop visual representations of growing geometric patterns and construct the next steps.
3.A.2 Use number sentences involving multiplication and unknowns to represent and solve real-world and mathematical problems.	3.A.2.1 Find unknowns represented by symbols in arithmetic problems by solving one-step open sentences (equations) and other problems involving addition, subtraction, and multiplication. Generate real-world situations to represent number sentences.
	3.A.2.2 Recognize, represent and apply the number properties (commutative, identity, and associative properties of addition and multiplication) using models and manipulatives to solve problems.
Geometry & Measurement (GM)	
3.GM.1 Use geometric attributes to describe and create shapes in various contexts.	3.GM.1.1 Sort three-dimensional shapes based on attributes.
	3.GM.1.2 Build a three-dimensional figure using unit cubes when picture/shape is shown.
	3.GM.1.3 Classify angles as acute, right, obtuse, and straight.
3.GM.2 Understand measurable attributes of real-world and mathematical objects using various tools.	3.GM.2.1 Find perimeter of polygon, given whole number lengths of the sides, in real-world and mathematical situations.
	3.GM.2.2 Develop and use formulas to determine the area of rectangles. Justify why length and width are multiplied to find the area of a rectangle by breaking the rectangle into one unit by one unit squares and viewing these as grouped into rows and columns.
	3.GM.2.3 Choose an appropriate measurement instrument and measure the length of objects to the nearest whole centimeter or meter.
	3.GM.2.4 Choose an appropriate measurement instrument and measure the length of objects to the nearest whole yard, whole foot, or half inch.



	3.GM.2.5 Using common benchmarks, estimate the lengths (customary and metric) of a variety of objects.
	3.GM.2.6 Use an analog thermometer to determine temperature to the nearest degree in Fahrenheit and Celsius.
	3.GM.2.7 Count cubes systematically to identify number of cubes needed to pack the whole or half of a three-dimensional structure.
	3.GM.2.8 Find the area of two-dimensional figures by counting total number of same size unit squares that fill the shape without gaps or overlaps.
3.GM.3 Solve problems by telling time to the nearest 5 minutes.	3.GM.3.1 Read and write time to the nearest 5-minute (analog and digital).
	3.GM.3.2 Determine the solutions to problems involving addition and subtraction of time in intervals of 5 minutes, up to one hour, using pictorial models, number line diagrams, or other tools.
Data & Probability (D)	
3.D.1 Summarize, construct, and analyze data.	3.D.1.1 Summarize and construct a data set with multiple categories using a frequency table, line plot, pictograph, and/or bar graph with scaled intervals.
	3.D.1.2 Solve one- and two-step problems using categorical data represented with a frequency table, pictograph, or bar graph with scaled intervals.



Oklahoma Academic Standards
SCIENCE



OKLAHOMA
Education



Reading the Oklahoma Academic Standards for Science



Oklahoma Academic Standards for Science

Kindergarten



Grade or Course

KINDERGARTEN (K)

Disciplinary Core
Idea Category

Motion and Stability of Forces (PS2)

K.PS2.1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.



Performance Expectation

Clarification Statement: Example investigations include observing the movement of different objects being pulled by a string, observing different objects pushed on a surface and used down a ramp, or observing how two objects (e.g., toy cars, balls) interact when they collide. Observations should be collected directly. **Assessment Boundary:** Assessment is limited to different relative strengths or different directions, but not both at the same time. Assessment does not include non-contact pushes or pulls such as those produced by magnets.



Clarification Statement & Assessment Boundary

Science and Engineering Practice

Disciplinary Core Ideas

Crosscutting Concepts

Planning and Carrying Out Investigations:

- Science plan an investigation and conduct an investigation in collaboration with peers.



Science and Engineering Practice

- Pushes and pulls can have different strengths and directions.
- Pushing or pulling on an object can change the speed or direction of motion.
- A bigger push or pull makes things speed up or slow down more quickly.
- When objects touch or collide, they push on one another and can change motion.



Disciplinary Core Ideas



Cause and Effect:

Simple tests can be designed to gather evidence to support or refute student ideas about causes.



3 RD GRADE (3)		
Motion and Stability: Forces and Interactions (PS2)		
3.PS2.1 Plan and conduct investigations on the effects of balanced and unbalanced forces on the motion of an object.		
Clarification Statement: Examples could include that an unbalanced force on one side of a ball can make it start moving and balanced forces pushing on a box from opposite sides will not produce any motion at all. Assessment Boundary: Assessment is limited to one variable at a time: number, size, or direction of forces. Assessment does not include quantitative force size, only qualitative and relative. Assessment is limited to gravity being addressed as a force that pulls objects down.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Planning and Carrying Out Investigations: <ul style="list-style-type: none"> Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. 	<ul style="list-style-type: none"> Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion. (Boundary: Qualitative and conceptual, but quantitative addition of forces is not used at this level.) Objects in contact exert forces on each other. 	Cause and Effect: <ul style="list-style-type: none"> Cause and effect relationships are routinely identified.
3.PS2.2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.		
Clarification Statement: Examples of motion with a predictable pattern could include a child swinging in a swing (pendulum), object rolling down a ramp from different heights, a ball rolling back and forth in a bowl, and two children on a see-saw. Assessment Boundary: Assessment does not include technical terms such as period and frequency.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Planning and Carrying Out Investigations: <ul style="list-style-type: none"> Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. 	<ul style="list-style-type: none"> The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed). 	Patterns: <ul style="list-style-type: none"> Patterns of change can be used to make predictions.



Motion and Stability: Forces and Interactions (PS2)		
3.PS2.3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.		
<p>Clarification Statement: Examples of an electric force could include the force on hair from an electrically charged balloon and the electrical forces between a charged rod and pieces of paper; examples of a magnetic force could include the force between two permanent magnets, the force between an electromagnet and steel paperclips, and the force exerted by one magnet versus the force exerted by two magnets. Examples of cause and effect relationships could include how the distance between objects affects strength of the force and how the orientation of magnets affects the direction of the magnetic force. Assessment Boundary: Assessment is limited to forces produced by objects that can be manipulated by students, and electrical interactions are limited to static electricity.</p>		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
<p>Asking Questions:</p> <ul style="list-style-type: none"> Ask questions that can be investigated based on patterns such as cause and effect relationships. 	<ul style="list-style-type: none"> Electric and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. 	<p>Cause and Effect:</p> <ul style="list-style-type: none"> Cause and effect relationships are routinely identified, tested, and used to explain change.
3.PS2.4 Define a simple design problem that can be solved by applying scientific ideas about magnets.*		
<p>Clarification Statement: Examples of problems could include a door that will not stay closed or two objects that keep colliding. Assessment Boundary: N/A</p>		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
<p>Define Problems:</p> <ul style="list-style-type: none"> Define a simple problem that can be solved through the development of a new or improved object or tool. 	<ul style="list-style-type: none"> Electric and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. Scientific discoveries about the natural world can often lead to new and improved technologies, which are developed through the engineering design process. 	<p>Cause and Effect:</p> <ul style="list-style-type: none"> Cause and effect relationships are routinely identified, tested, and used to explain change. <i>Other crosscutting concepts may be more appropriate depending on the problem chosen.</i>



From Molecules to Organisms: Structure and Function (LS1)		
3.LS1.1 Develop and use models to describe that organisms have unique and diverse life cycles but all have a common pattern of birth, growth, reproduction, and death.		
Clarification Statement: Changes different organisms go through during their life form a pattern. Organism life cycles that can be studied include mealworms, dandelions, lima beans, dogs, and butterflies. Assessment Boundary: Assessment includes animal and plant life cycles. Plant life cycles are limited to those of flowering plants. Assessment does not include details of human reproduction or microscopic organisms.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Developing and Using Models: <ul style="list-style-type: none"> Develop models to describe phenomena. 	<ul style="list-style-type: none"> Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. 	Patterns: <ul style="list-style-type: none"> Patterns of change can be used to make predictions.
Heredity: Inheritance and Variation of Traits (LS2)		
3.LS2.1 Construct an argument that some animals form groups that help members survive.		
Clarification Statement: Arguments could include examples of group behavior such as division of labor in a bee colony, flocks of birds staying together to confuse or intimidate predators, or wolves hunting in packs to more efficiently catch and kill prey. When animals are no longer part of their group, they may not survive as well. Assessment Boundary: N/A		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Engage in Argument from Evidence: <ul style="list-style-type: none"> Construct an argument from evidence, data, and/or a model. 	<ul style="list-style-type: none"> Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size. 	Cause and Effect: <ul style="list-style-type: none"> Cause and effect relationships are routinely used to explain change.



Heredity: Inheritance and Variation of Traits (LS3)		
3.LS3.1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.		
Clarification Statement: Patterns are the similarities and differences in traits shared between offspring and their parents, or among siblings. Emphasis is on organisms other than humans. Assessment Boundary: Assessment does not include genetic mechanisms of inheritance and prediction of traits. Assessment is limited to non-human examples.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Analyzing and Interpreting Data: <ul style="list-style-type: none"> Analyze and interpret data to make sense of phenomena using logical reasoning. 	<ul style="list-style-type: none"> Many characteristics of organisms are inherited from their parents. Different organisms vary in how they look and function because they have different inherited information. 	Patterns: <ul style="list-style-type: none"> Similarities and differences in patterns can be used to sort and classify natural phenomenon.
3.LS3.2 Use evidence to support the explanation that traits can be influenced by the environment.		
Clarification Statement: Examples of the environment affecting a trait could include that normally tall plants grown with insufficient water are stunted; a pet dog that is given too much food and little exercise may become overweight; and animals who teach their offspring skills like hunting. Assessment Boundary: N/A		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Constructing Explanations: <ul style="list-style-type: none"> Use evidence (e.g., observations, patterns) to support an explanation. 	<ul style="list-style-type: none"> Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. The environment also affects the traits that an organism develops. 	Cause and Effect: <ul style="list-style-type: none"> Cause and effect relationships are routinely identified and used to explain changes.



Biological Unity and Diversity (LS4)		
3.LS4.1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.		
<p>Clarification Statement: Examples of data could include type, size, and distribution of fossil organisms. Examples of fossils and environments could include marine fossils found on dry land, tropical plant fossils found in Arctic areas, and fossils of extinct organisms. Assessment Boundary: Assessment does not include identification of specific fossils or present plants and animals. Assessment is limited to major fossil types and relative ages.</p>		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
<p>Analyzing and Interpreting Data:</p> <ul style="list-style-type: none"> Analyze and interpret data to make sense of phenomena using logical reasoning. 	<ul style="list-style-type: none"> Some kinds of plants and animals that once lived on Earth are no longer found anywhere. Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments. 	<p>Scale, Proportion, and Quantity:</p> <ul style="list-style-type: none"> Observable phenomena exist from very short to very long time periods.
3.LS4.2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and reproducing.		
<p>Clarification Statement: Examples of cause and effect relationships could be plants that have larger thorns than other plants may be less likely to be eaten by predators; and animals that have better camouflage coloration than other animals may be more likely to survive and therefore more likely to leave offspring. Assessment Boundary: N/A</p>		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
<p>Constructing Explanations:</p> <ul style="list-style-type: none"> Use evidence (e.g., observations, patterns) to construct an explanation. 	<ul style="list-style-type: none"> Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. 	<p>Cause and Effect:</p> <ul style="list-style-type: none"> Cause and effect relationships are routinely identified, tested, or used to explain change.



Biological Unity and Diversity (LS4)		
3.LS4.3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.		
Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other. At no time should animals be put in danger to collect evidence. Assessment Boundary: N/A		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Engaging in Argument from Evidence: <ul style="list-style-type: none"> Construct an argument with evidence. 	<ul style="list-style-type: none"> For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. Changes in an organism's habitat are sometimes beneficial to it and sometimes harmful. 	Cause and Effect: <ul style="list-style-type: none"> Cause and effect relationships are routinely identified and used to explain change.
3.LS4.4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.*		
Clarification Statement: Examples of environmental changes could include changes in land characteristics, water distribution, temperature, food, and other organisms. Assessment Boundary: Assessment is limited to a single environmental change. Assessment does not include the greenhouse effect or climate change.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Engaging in Argument from Evidence: <ul style="list-style-type: none"> Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. 	<ul style="list-style-type: none"> When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. Populations live in a variety of habitats, and change in those habitats affects the organisms living there. 	Systems and System Models: <ul style="list-style-type: none"> A system can be described in terms of its components and their interactions.



Earth's Systems (ESS2)		
3.ESS2.1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.		
Clarification Statement: Examples of data at this grade level could include average temperature, precipitation, and wind direction. Assessment Boundary: Assessment of graphical displays is limited to frequency tables, line plots, pictographs, and single bar graphs. Students are not expected to calculate averages but simply to represent them in graphical form.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Analyzing and Interpreting Data: <ul style="list-style-type: none"> Represent data in tables and various graphical displays (bar graphs and pictographs) to reveal patterns that indicate relationships. 	<ul style="list-style-type: none"> Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. 	Patterns: <ul style="list-style-type: none"> Patterns of change can be used to make predictions.
Earth's Systems (ESS2)		
3.ESS2.2 Obtain and combine information to describe climates in different regions of the world.		
Clarification Statement: Information could include hours of daylight, amount of precipitation, temperature, seasons, and wind. Descriptions could include the use of frequency tables, line plots, pictographs, and single bar graphs. Climate data should include weather conditions over multiple years. Assessment Boundary: Assessments do not include causes of seasons.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Obtaining, Evaluating, and Communicating Information: <ul style="list-style-type: none"> Obtain and combine information from books and other reliable media to explain phenomena. 	<ul style="list-style-type: none"> Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years to centuries. 	Patterns: <ul style="list-style-type: none"> Patterns of change can be used to make predictions.



Earth and Human Activity (ESS3)		
3.ESS3.1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.*		
Clarification Statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding, wind/hail resistant roofs/windows, textured walking surfaces for ice, tornado shelters, and lightning rods. While earthquakes, volcanoes, and tsunamis are natural hazards they are not caused by weather phenomenon. Assessment Boundary: Assessments are limited to weather-related hazards only.		
Science and Engineering Practice	Disciplinary Core Ideas	Crosscutting Concepts
Engaging in Argument from Evidence: <ul style="list-style-type: none"> Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. 	<ul style="list-style-type: none"> A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impact. Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones). 	Cause and Effect: <ul style="list-style-type: none"> Cause and effect relationships are routinely identified, tested, and used to explain change.

OKLAHOMA ACADEMIC STANDARDS

SOCIAL STUDIES



OKLAHOMA STATE DEPARTMENT OF
EDUCATION
— CHAMPION EXCELLENCE —



Reading the Oklahoma Academic Standards for Social Studies

Practices



Oklahoma Academic Standards for Social Studies 2nd Grade (2)



Grade or Course

Engage in Democratic Processes

Analyze and Address Authentic Civic Issues

Acquire, Apply, and Evaluate Evidence

Read Critically and Interpret Informational Sources

Engage in Evidence-Based Writing

2nd Grade Content Standards

2.1 The student will explain the importance of the basic principles that provide the foundation of the American system of government.

Standards



2.2 The student will describe the physical and human characteristics of their environment.

2.1.1 Describe the Constitution of the United States as the structure for our national government.

2.1.2 Summarize the five key individual rights and liberties protected by the First Amendment to the Constitution of the United States.

2.1.3 Explain how active citizens participate in the government by voting to elect officials that represent them.

2.1.4 Identify the basic roles of national leaders including the President of the United States, the members of the United States Congress, and the justices of the Supreme Court.

2.1.5 Explain how all people can play an important role in their community.



Objectives

2.2.1 Construct basic maps using cardinal directions and map symbols.

2.2.2 Describe absolute and relative location using latitude, longitude, and hemispheres on basic maps and globes.

2.2.3 Use political maps to locate the state of Oklahoma and the six bordering states.

2.2.4 Identify and locate basic landforms, bodies of water, continents, and oceans on a map.

2.2.5 Describe how communities modify the environment to meet their needs.

2.2.6 Describe customs, traditions, clothing, food, housing, and music as basic elements of various cultures represented within the local community.



Oklahoma Academic Standards for Social Studies 3rd Grade (3)

Engage in Democratic Processes	Analyze and Address Authentic Civic Issues	Acquire, Apply, and Evaluate Evidence	Read Critically and Interpret Informational Sources	Engage in Evidence-Based Writing
3 rd Grade Content Standards				
3.1 The student will analyze the traits of good citizens.	3.1.1 Examine and determine the main purposes of Oklahoma's state government and identify elected leaders of the state of Oklahoma and the three branches of government.			
	3.1.2 Explain that tribal governments in Oklahoma have a right to self-government known as sovereignty.			
	3.1.3 Describe the historical significance of the symbols of Oklahoma including the Oklahoma State Seal and the Oklahoma Flag; explain how the name of Oklahoma is derived from the Choctaw language.			
	3.1.4 Describe relationships between people and events of the past, including those commemorated on national, state, and community holidays.			
	3.1.5 Define the concept of civic virtue and responsibilities of the citizen at the local, state, and tribal levels, including respect for diversity.			
3.2 The student will examine Oklahoma's geography and how people of Oklahoma interact with their environment.	3.2.1 Examine Oklahoma's political and physical features. <ul style="list-style-type: none"> A. Identify the state of Oklahoma using relative location, absolute location (latitude and longitude), direction, scale, size, and shape using physical and political maps. B. Interpret thematic maps of Oklahoma with the essential map elements of title, legend, scale, and directional indicators. C. Identify Oklahoma's major landforms and bodies of water on a physical map. D. Identify Oklahoma's major metropolitan centers and cities on a political map. E. Describe the climate and various natural vegetation zones found in Oklahoma. F. Identify the six states bordering Oklahoma on a map. 			



	<p>3.2.2 Examine the interaction of the environment and the peoples of Oklahoma.</p> <ul style="list-style-type: none">A. Describe how early American Indians used Oklahoma’s natural resources, such as bison hunting, fur trading, and farming.B. Describe how pioneers to Oklahoma adapted to and modified their environment, such as sod houses, windmills, and crops.C. Summarize how the weather and the environment have impacted the economy of Oklahoma in events such as the Dust Bowl, floods, and tornadoes.D. Summarize how Oklahomans affect and change their environments such as the construction of the McClellan-Kerr Arkansas River Navigation System, creation of recreational lakes by the building of dams, irrigation of croplands, and the establishment of wildlife refuges.
	<p>3.2.3 Identify the characteristics of renewable and non-renewable resources and evaluate the role of citizens in conserving natural resources.</p>
<p>3.3 The student will analyze the significant events and historic personalities contributing to the development of the state of Oklahoma.</p>	<p>3.3.1 Understand and describe the relationship between historic events and chronology through the creation of basic timelines.</p>
	<p>3.3.2 Read and interpret primary sources related to key events in Oklahoma’s past.</p>
	<p>3.3.3 Describe American Indian pre-contact cultures that have inhabited what is now Oklahoma, such as the Spiro Mound Builders.</p>
	<p>3.3.4 Identify cultural similarities and differences of the existing sovereign tribal nations in Oklahoma, especially those near the local community.</p>
	<p>3.3.5 Describe early expeditions into Oklahoma such as those of Coronado, Washington Irving, and George Catlin.</p>
	<p>3.3.6 Describe the migrations, settlements, relocations and forced removals of American Indians.</p>
	<p>3.3.7 Describe cowboy life and cattle drives as typified by experiences along such routes as the Chisholm Trail and the impact of Mexican ranching traditions on the cattle industry and cowboy culture.</p>
	<p>3.3.8 Distinguish between the points of view of both American Indians and settlers regarding the opening of territories in Oklahoma for settlement.</p>
	<p>3.3.9 Commemorate Statehood Day, November 16, as the joining of Indian and Oklahoma Territories.</p>



Oklahoma Academic Standards for Social Studies 3rd Grade (3)

	3.3.10 Describe the contributions of Oklahoma’s military personnel, including the Buffalo Soldiers, the code talkers, and the 45 th Infantry.
	3.3.11 Explain how Oklahomans come together to help one another during difficult times, such as recovering from the bombing of the Oklahoma City Murrah Building, exhibiting what has become the “Oklahoma Standard”.
	3.3.12 Examine notable historic and present-day Oklahomans utilizing biographies and information texts such as Jim Thorpe, Sequoyah, Will Rogers, Wiley Post, Mickey Mantle, Shannon Lucid, Bill Pickett, Clara Luper, and Maria Tallchief.
3.4 The student will identify and describe basic economic activities creating prosperity in the state of Oklahoma.	3.4.1 Compare differences among human, natural, and capital resources used to produce goods and services.
	3.4.2 Summarize how the factors of scarcity and surplus and the laws of supply and demand of natural and human resources require people to make choices about producing and consuming goods and services.
	3.4.3 Examine how the development of Oklahoma’s major economic activities have contributed to the growth of the state, including, mining and energy industry, agriculture, aviation, tourism, tribal enterprises, and military installations.