

THE BRAIN: OUR SENSE OF SELF

Oklahoma Priority Academic Student Skills – Science Processes and Inquiry – Grades 6, 7, 8

Lesson	Standard	Description
2, 4	1.1	Identify qualitative and quantitative changes given conditions (e.g., temperature, mass, volume, time, position, length, quantity) before, during, and after an event.
4	1.3	Use appropriate System International (SI) units (i.e., grams, meters, liters, degrees Celsius, and seconds); and SI prefixes (i.e., micro-, milli-, centi-, and kilo-) when measuring objects, organisms, and/or events.
2	2.1	Use observable properties to place an object, organism, and/or event into a classification system (e.g., dichotomous keys).
2	2.2	Identify properties by which a set of objects, organisms, and/or events could be ordered.
3, 4	3.1	Ask questions about the world and design investigations that lead to scientific inquiry.
3, 4	3.2	Evaluate the design of a scientific investigation.
3, 4	3.3	Identify variables and/or controls in an experimental setup (i.e., tested, experimental, and measured variables).
3, 4	3.4	Identify a testable hypothesis for an experiment.
3, 4	3.5	Design and conduct experiments.
3, 4	4.1	Report data in an appropriate method when given an experimental procedure or data.
3, 4	4.2	Interpret data tables, line, bar, trend, and/or circle graphs.
2, 3, 4, 5	4.3	Evaluate data to develop reasonable explanations, and/or predictions.
3, 4, 5	4.4	Accept or reject hypotheses when given results of an investigation.
3, 4, 5	4.5	Communicate scientific procedures and explanations.
All lessons	5.1	Use systematic observations, make accurate measurements, and identify and control variables.
3, 4	5.2	Use technology to gather data and analyze results of investigations.
2, 3, 4, 5	5.3	Review data, summarize data, and form logical conclusions.
All lessons	5.4	Formulate and evaluate explanations proposed by examining and comparing evidence, pointing out statements that go beyond evidence, and suggesting alternative explanations.

Oklahoma Priority Academic Student Skills – Science – Grades 6 & 7		
Lesson	Standard	Description
2, 3, 4	2.1	Living systems are organized by levels of complexity (i.e., cells, tissues, organs, and/or systems). (7)
3, 4	2.2	Specialized structures perform specific functions at all levels of complexity (e.g., leaves on trees and wings on birds). (7)
All lessons	3.1	Characteristics of an organism result from inheritance and from interactions with the environment. (7)
All lessons	4.2	Living organisms have physical and/or behavioral responses to external stimuli (e.g., hibernation, migration, plant growth). (7)
Oklahoma Priority Academic Student Skills – Mathematics Process Standards – Grades 6, 7, 8		
Lesson	Standard	Description
4	1.1	Develop and test strategies to solve practical, everyday problems which may have single or multiple answers.
3, 4	1.2	Use technology to generate and analyze data to solve problems.
4	1.3	Formulate problems from situations within and outside of mathematics and generalize solutions and strategies to new problem situations.
4	1.4	Evaluate results to determine their reasonableness.
4	1.6	Use oral, written, concrete, pictorial, graphical, and/or algebraic methods to model mathematical situations.
4	2.1	Discuss, interpret, translate (from one to another) and evaluate mathematical ideas (e.g., oral, written, pictorial, concrete, graphical, algebraic).
4	2.2	Reflect on and justify reasoning in mathematical problem solving (e.g., convince, demonstrate, formulate).
3, 4	3.1	Identify and extend patterns and use experiences and observations to make suppositions.
4	4.1	Apply mathematical strategies to solve problems that arise from other disciplines and the real world.
4	5.1	Use a variety of representations to organize and record data (e.g., use concrete, pictorial, and symbolic representations).
3, 4	5.4	Use a variety of representations to model and solve physical, social, and mathematical problems (e.g., geometric objects, pictures, charts, tables, graphs).

Oklahoma Priority Academic Student Skills – Mathematics Content Standards – Grades 6, 7, 8		
Lesson	Standard	Description
4	2.1	Multiply and divide fractions and mixed numbers to solve problems using a variety of methods. (6)
4	5.1	Collect, organize, and interpret data to solve problems (e.g., data from student experiments, tallies, Venn diagrams, tables, circle and bar graphs, spreadsheets). (6)
4	2.1.b	Use the basic operations on integers to solve problems. (7)
4	2.1.a	Compare and order rational numbers (positive and negative integers, fractions, decimals) in real-life situations. (8)
	2.1.c	Apply ratios and proportions to solve problems. (8)
4	5.1	Select and apply appropriate formats (e.g., line plots, bar graphs, stem-and-leaf plots, scatter plots, histograms, circle graphs) to display collected data. (8)
4	5.3	Determine how samples are chosen (random, limited, biased) to draw and support conclusions about generalizing a sample to a population (e.g., is the average height of a men’s college basketball team a good representative sample for height predictions?). (8)
Oklahoma Priority Academic Student Skills – Language Arts – Grades 6, 7, 8		
Lesson	Standard	Description
2, 3, 4, 5	3.2.a	Draw inferences and conclusions about text and support them with textual evidence and prior knowledge. (Reading)
2, 3, 4, 5	3.3.a	Summarize and paraphrase information including the main idea and significant supporting details of a reading selection. (6 & 7 – Reading) Determine the main (or major) idea and how those ideas are supported with specific details. (8 – Reading)
2, 3, 4, 5	3.3.b	Make generalizations based on information gleaned from text. (6 – Reading) Paraphrase and summarize text to recall, inform, or organize ideas. (8 – Reading)
2, 3, 4, 5	3.3.d	Support reasonable statements by reference to relevant aspects of text and examples. (7 – Reading)
2, 3, 4, 5	3.4.d	Problem/solution - offer observations, make connections, react, speculate, interpret, and raise questions in response to text. (8 – Reading)
2, 3, 4, 5	5.1.b	Access information from a variety of primary and secondary sources to gather information for research topics. (6 & 7 - Reading)

OKLAHOMA ALIGNMENT FOR NIH SUPPLEMENT THE BRAIN: OUR SENSE OF SELF

2, 3, 4, 5	1.2	Make generalizations based on information gleaned from text. (6 - Writing) Use details, examples, reasons, and evidence to develop an idea. (7 & 8 – Writing)
2, 3, 4, 5	1.4	Use precise word choices, including figurative language, that convey specific meaning and tone. (Writing)
2, 3, 4, 5	1.5	Use a variety of sentence structures, types, and lengths to contribute to fluency and interest. (Writing)
2, 3, 4	2.2.d	Write research reports that: organize and display information on charts, tables, maps, and graphs. (8 – Writing)
2, 3, 4, 5	2.7	Write for different purposes and audiences, adjusting tone, style, and voice as necessary to make writing interesting. (6 - Writing)
2, 3, 4, 5	2.8	Write for different purposes and audiences, adjusting tone, style, and voice as necessary to make writing interesting. (7 & 8 - Writing)
2, 3, 4, 5	1.1	Identify the major ideas and supporting evidence in informative and persuasive messages. (Listening)
All lessons	1.2	Determine the purpose for listening (i.e., gaining information, solving problems; or for enjoying, appreciating, recalling, interpreting, applying, analyzing, evaluating, receiving directions, or learning concepts). (6 – Listening) Listen in order to identify and discuss topic, purpose, and perspective. (7 & 8 – Listening)
All lessons	2.1	Analyze purpose, audience, and occasion and consider this information in planning an effective presentation or response. (Listening)
All lessons	2.4	Use level-appropriate vocabulary in speech (e.g., metaphorical language, sensory details, or specialized vocabulary). (7 & 8 – Listening)

Oklahoma Priority Academic Student Skills – Health and Safety Literacy – Grades 5 - 8

Lesson	Standard	Description
4, 5	1.1	Analyze how environment and personal health are interrelated.
3, 4	1.8	Determine the structure and purpose of the body systems: circulatory, digestive, endocrine, excretory, immune, muscular, nervous, reproductive, respiratory, and skeletal.
3, 4	1.11	Analyze the interrelationship of the body systems: circulatory, digestive, endocrine, excretory, immune, muscular, nervous, reproductive, respiratory, and skeletal.
4, 5	7.1	Interpret information and analyze personal opinions concerning health and safety issues.
4, 5	7.4	Examine various methods for communicating health information and ideas.