THE BRAIN: OUR SENSE OF SELF		
Nevada Science Academic Standards: Grades 6 – 8		
Lesson	**Standard**	**Objective**
3, 4	**N.8.A.1**	Students know how to identify and critically evaluate information in data, tables, and graphs.
All lessons	**N.8.A.2**	Students know how to critically evaluate information to distinguish between fact and opinion.
All lessons	**N.8.A.3**	Students know different explanations can be given for the same evidence.
4	**N.8.A.5**	Students know how to use appropriate technology and laboratory procedures safely for observing, measuring, recording, and analyzing data.
2, 3, 4	**N.8.A.6**	Students know scientific inquiry includes evaluating results of scientific investigations, experiments, observations, theoretical and mathematical models, and explanations proposed by other scientists.
2, 3, 4	**N.8.A.7**	Students know there are multiple methods for organizing items and information.
2, 3, 4, 5	**N.8.B.3**	Students know scientific knowledge is revised through a process of incorporating new evidence gained through on-going investigation and collaborative discussion.
4	**L.8.A.4**	Students know some characteristics of an organism are the result of a combination of interaction with the environment and genetic information.
3	**L.8.B.1**	Students know all organisms are composed of cells, which are the fundamental units of life.
2, 3	**L.8.B.4**	Students know cells combine to form tissues that combine to form organs and organ systems that are specialized to perform life functions.
5	**L.8.B.5**	Students know disease can result from defects in body systems or from damage caused by infection.
4	**L.8.C.3**	Students will evaluate how changes in environments can be beneficial or harmful.
4	**L.8.D.3**	Students know an organism's behavior is based on both experience and on the species' evolutionary history.
Nevada Mathematics Academic Standards: Grades 6 – 8		
Mathematics Process Standards		
Lesson	**Standard**	**Objective**
4	**A.1**	Generalize solutions and apply previous knowledge to new problem solving situations.
4	**A.2**	Determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem.
4	**A.5**	Identify necessary and extraneous information.
4	**A.7**	Apply technology as a tool in problem solving situations.
4	**A.8**	Apply combinations of proven strategies and previous knowledge to solve non-routine problems.

4	**B.1**	Use formulas, algorithms, inquiry, and other techniques to solve mathematical problems.
4	**B.4**	Model and explain mathematical relationships using oral, written, graphic, and algebraic methods.
4	**B.5**	Use everyday language, both orally and in writing, to communicate strategies and solutions to mathematical problems.
4	**D.4**	Apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science.
4	**D.5**	Identify, explain, and apply mathematics in everyday life.
Grade 6		
4	**2.6.3**	Write simple expressions and equations using variables to represent mathematical situations.
4	**5.6.1.a**	Pose questions that guide the collection of data.
4	**5.6.1.b**	Organize and represent data using a variety of graphical representations including circle graphs and scatter plots.
4	**5.6.6**	Analyze various representations of a set of data to draw conclusions and make predictions.
Grade 7		
4	**1.7.6**	Generate a reasonable estimate for a computation using a variety of methods.
4	**1.7.7**	Calculate with integers and other rational numbers to solve mathematical and practical situations.
4	**5.7.1.a**	Formulate questions that guide the collection of data.
4	**5.7.1.b**	Organize, display, and read data using the appropriate graphical representations (with and without technology).
4	**5.7.6**	Interpolate and extrapolate from data to make predictions for a given set of data.
Grade 8		
4	**1.8.2**	Use estimation strategies to determine the reasonableness of an answer in mathematical and practical situations.
4	**1.8.7**	Calculate with real numbers to solve mathematical and practical situations.
4	**2.8.6**	Describe how changes in the value of one variable affect the values of the remaining variables in a relation.
4	**5.8.1.a**	Formulate questions and design a study that guides the collection of data.
4	**5.8.1.b**	Organize, display, and read data including box and whisker plots (with and without technology).
4	**5.8.6**	Formulate reasonable inferences and predictions through interpolation and extrapolation of data to solve practical problems.
Nevada English Language Arts Academic Standards: Grades 6 – 8		
Grade 6		
Lesson	**Standard**	**Objective**
3, 4, 5	**1.6.3**	Identify and use the meanings of high frequency Greek- and Latin-derived roots and affixes to determine the meanings of words.

3, 4, 5	**2.6.1**	Develop a plan for reading that includes the determination of purpose, appropriate rate for fiction vs. nonfiction, and related graphic organizers.
3, 4, 5	**2.6.3**	Identify and explain the relationships between main ideas and supporting details in text.
1, 2, 3, 4	**4.6.6**	Read and follow multi-step directions to complete a complex task.
3, 4, 5	**5.6.1**	Write informative papers that develop a clear topic with appropriate facts, details, and examples from a variety of sources and have a distinct beginning, middle, and ending.
3, 4, 5	**6.6.2**	Use organizing techniques appropriate to the purpose for writing.
3, 4, 5	**6.6.3**	Write paragraphs and compositions with clear transitions between ideas.
3, 4, 5	**6.6.6**	Produce writing with a voice that shows awareness of an intended audience and purpose.
3, 4, 5	**7.6.5**	Spell frequently misspelled words correctly (e.g., their/they're/there and you're/your).
1, 2, 3, 4	**8.6.4**	Follow multi-step oral directions to complete a task.
All lessons	**9.6.1**	Use specific and varied vocabulary and apply standard English to communicate ideas.
1, 2, 3, 4	**9.6.5**	Give clear and concise multi-step directions to complete a complex task.
All lessons	**10.6.1**	Demonstrate active listening skills by participating in conversations and group discussions.
All lessons	**10.6.2**	Ask and answer questions to generate possible solutions to a problem.
All lessons	**10.6.4**	Evaluate the logic and effectiveness of a speaker's argument(s).
3, 4	**11.6.1**	Formulate a plan for research to answer a focused question.
All lessons	**11.6.4**	Record information using note-taking and organizational formats.
Grade 7		
3, 4, 5	**1.7.3**	Apply Greek- and Latin-derived roots and affixes to determine the meaning of unknown words.
3, 4, 5	**2.7.1**	Determine techniques for building background knowledge to aid comprehension.
3, 4, 5	**2.7.3**	Make inferences from text to aid comprehension.
3, 4, 5	**4.7.3**	Paraphrase and synthesize information from several sources to demonstrate comprehension.
1, 2, 3, 4	**4.7.6**	Read and follow multi-step directions to complete a complex task.
3, 4, 5	**5.7.1**	Write informative papers that have a structured beginning, middle, and conclusion and draw upon a variety of sources.
2, 3, 4	**5.7.2**	Convert text into visual formats, such as charts and graphs for a specific audience and purpose.
3, 4	**5.7.5**	Write summaries of procedures such as a science lab experiment or an explanation of how to solve a math problem.
3, 4, 5	**6.7.2**	Select and use organizing techniques appropriate to the purpose for writing.
3, 4, 5	**6.7.3**	Write compositions that focus on a main topic supported by relevant examples, anecdotes, and/or details.
3, 4, 5	**6.7.6**	Produce writing with a voice that addresses an intended audience and purpose.
3, 4, 5	**7.7.5**	Demonstrate conventional spelling.
1, 2, 3, 4	**8.7.4**	Follow multi-step oral directions to complete a task.

All lessons	**9.7.1**	Use specific and varied vocabulary and apply standard English to communicate ideas.
1, 2, 3, 4	**9.7.5**	Give clear and concise multi-step directions to complete a complex task.
All lessons	**10.7.1**	Provide constructive feedback when participating in conversations and group discussions.
All lessons	**10.7.2**	Distinguish between relevant and irrelevant information offered in support of an opinion.
All lessons	**10.7.4**	Develop logical arguments in support of opinions.
3, 4	**11.7.1**	Formulate questions and statements of purpose to guide cross-curricular research.
All lessons	**11.7.4**	Record information using a self-selected note-taking or organizational strategy.
Grade 8		
3, 4, 5	**1.8.3**	Apply knowledge of Greek- and Latin-derived roots and affixes to determine the meaning of unknown words and to increase vocabulary.
3, 4, 5	**2.8.1**	Apply and analyze the use of appropriate pre-reading strategies that enhance comprehension, such as accessing prior knowledge, predicting, previewing, and setting a purpose.
3, 4, 5	**2.8.3**	Apply and analyze a variety of skills and strategies such as locating essential information, verifying predictions, drawing conclusions, and making inferences to aid comprehension.
3, 4, 5	**4.8.3**	Locate, interpret, organize, and synthesize information from texts to answer specific questions and support ideas.
1, 2, 3, 4	**4.8.6**	Read and follow multi-step directions to complete a complex task.
3, 4, 5	**5.8.1**	Write informative papers that develop a topic with introductory and concluding statements and supporting ideas, examples, and details from a variety of sources.
3, 4, 5	**5.8.5**	Write summaries that present main ideas and key supporting information.
3, 4, 5	**6.8.2**	Use organizing techniques appropriate to the purpose for writing.
3, 4, 5	**6.8.3**	Write coherent compositions with a controlling impression or thesis statement.
3, 4, 5	**6.8.6**	Produce writing with a voice that is expressive and appropriate to audience and purpose.
3, 4, 5	**7.8.5**	Demonstrate conventional spelling.
2	**8.8.1**	Identify and paraphrase a speaker's main ideas and supporting evidence to draw meaning from and ask relevant questions about content and purpose of oral presentations.
1, 2, 3, 4	**8.68.4**	Follow multi-step oral directions to complete a task.
All lessons	**9.8.1**	Use specific and varied vocabulary and apply standard English to communicate ideas.
1, 2, 3, 4	**9.8.5**	Give clear and concise multi-step directions to complete a complex task.
All lessons	**10.8.1**	Participate in conversations and group discussions as active listeners who provide constructive feedback.
All lessons	**10.8.2**	Ask for and provide specific evidence in support of an opinion.
All lessons	**10.8.4**	Express supported opinions while considering divergent viewpoints.
3, 4	**11.8.1**	Formulate questions and develop a clear statement of purpose that lead to inquiry, investigation, and research of cross-curricular topics.

All lessons	**11.8.4**	Record information using a variety of note-taking and organizational strategies.
Nevada Health Education Core Curriculum Standards: Grade 8		
Lesson	**Standard**	**Objective**
4	**1.8.1**	Explain the impact of personal health behaviors on the functioning of body systems.
4	**2.8.1**	Differentiate health concerns as personal responsibility or professional responsibility.
2, 3, 4, 5	**2.8.2**	Identify characteristics of scientifically valid health information.
5	**6.8.2**	Compare and contrast the short and long-term impact of health decisions on the individual and society.