	OPEN WIDE AND TREK INSIDE Ohio Academic Content Standards for Life Science – Grades 1 & 2		
Lesson	Standard	Description	
1, 4, 5	Life 1	Explore that organisms, including people, have basic needs, which include air, water, food, living space and shelter. (1) Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive. (2)	
4, 5	Life 2	Identify that there are many distinct environments that support different kinds of organisms. (2)	
1, 2	Life 3	Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose and sharp vision). (1)	
1, 2, 4, 5	Life 4	Compare similarities and differences among individuals of the same kind of plants and animals, including people. (2)	
1, 4, 5	Life 5	Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.). (2)	
Oh	io Academic Con	tent Standards for Scientific Inquiry and Scientific Ways of Knowing - Grades 1 & 2 Grade 1	
Lesson	Standard	Description	
1, 3, 5	Inquiry 1	Ask "what happens when" questions.	
1, 3, 5	Inquiry 2	Explore and pursue student-generated "what happens when" questions.	
3	Inquiry 3	Use appropriate safety procedures when completing scientific investigations.	
3	Inquiry 4	Work in a small group to complete an investigation and then share findings with others.	
3, 5	Inquiry 5	Create individual conclusions about group findings.	
3	Inquiry 6	Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers, timers and simple balances and other appropriate tools).	
3	Inquiry 7	Make estimates to compare familiar lengths, weights and time intervals.	
2, 3, 5, 6	Inquiry 8	Use oral, written and pictorial representation to communicate work.	
All lessons	Inquiry 9	Describe things as accurately as possible and compare with the observations of others.	
All lessons	Ways of Knowing 2	Demonstrate good explanations based on evidence from investigations and observations.	

All lessons	Ways of Knowing 3	Explain that everybody can do science, invent things and have scientific ideas no matter where they live.	
	Grade 2		
Lesson	Standard	Description	
1, 2, 3, 5, 6	Inquiry 1	Ask "how can I/we" questions.	
All lessons	Inquiry 2	Ask "how do you know" questions (not "why" questions) in appropriate situations and attempt to give reasonable answers when others ask questions.	
1, 2, 3	Inquiry 3	Explore and pursue student-generated "how" questions.	
1, 2, 3	Inquiry 4	Use appropriate safety procedures when completing scientific investigations.	
All lessons	Inquiry 5	Use evidence to develop explanations of scientific investigations. (What do you think? How do you know?)	
All lessons	Inquiry 6	Recognize that explanations are generated in response to observations, events and phenomena.	
3	Inquiry 7	Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers, non-breakable thermometers, timers, rulers, balances and calculators and other appropriate tools).	
3	Inquiry 8	Measure properties of objects using tools such as rulers, balances and thermometers.	
1, 2, 3	Inquiry 9	Use whole numbers to order, count, identify, measure and describe things and experiences.	
All lessons	Inquiry 10	Share explanations with others to provide opportunities to ask questions, examine evidence and suggest alternative explanations.	
3	Ways of Knowing 2	Explain why scientists review and ask questions about the results of other scientists' work.	
All lessons	Ways of Knowing 4	Demonstrate that in science it is helpful to work with a team and share findings with others.	
	Ohio Academic Content Standards for English Language Arts – Grades 1 & 2		
Lesson	Standard	Description	
2, 3, 4, 6	Reading Process 2	Establish a purpose for reading (e.g., to be informed, to follow directions or to be entertained).	
4, 6	Reading Process 3	Visualize the information in texts and demonstrate this by drawing pictures, discussing images in texts or writing simple descriptions.	
4, 6	Reading Process 4	Make predictions while reading and support predictions with information from the text or prior experience.	
1, 2, 4, 6	Reading Process 5	Compare information (e.g., recognize similarities) in texts with prior knowledge and experience.	
1, 2, 4, 6	Reading Process 6	Recall the important ideas in fictional and non-fictional texts	

02/2007 Ohio Academic Content Standards: http://www.ode.state.oh.us/academic content standards/
National Health Standards: http://www.aahperd.org/aahe/pdf files/standards.pdf#search=%22national%20health%20standards%22

1	Reading Process 7	Create and use graphic organizers such as Venn diagrams or webs, with teacher assistance, to demonstrate comprehension.
1, 2, 4, 6	Reading Process 8	Answer literal, simple inferential and evaluative questions to demonstrate comprehension of grade-appropriate print texts and electronic and visual media.
4	Reading Applications 2	Identify the sequence of events in informational text.
4	Reading Applications 3	Ask questions concerning essential elements of informational text (e.g., why, who, where, what, when and how).
4	Reading Applications 4	Identify central ideas and supporting details of informational text with teacher assistance.
1, 2, 3, 4, 6	Reading Applications 6	Follow multiple-step directions.
All lessons	Writing Process 1	Generate writing ideas through discussions with others.
All lessons	Writing Process 2	Develop a main idea for writing
All lessons	Writing Process 3	Determine purpose and audience.
All lessons	Writing Process 5	Organize writing to include a beginning, middle and end.
All lessons	Writing Process 14	Rewrite and illustrate writing samples for display and for sharing with others.
All lessons	Writing Applications 4	Produce informal writings (e.g., messages, journals, notes and poems) for various purposes.
All lessons	Writing Conventions 1	Print legibly and space letters, words and sentences appropriately.
All lessons	Writing Conventions 3	Spell high-frequency words correctly.
1, 2, 3	Research 1	Discuss ideas for investigation about a topic or area of personal interest.
All lessons	Research 3	Use books or observations to gather information to explain a topic or unit of study with teacher assistance.
All lessons	Research 4	Recall important information about a topic with teacher assistance.
All lessons	Research 5	Report information to others.
All lessons	Communication 1	Use active listening skills, such as making eye contact or asking questions.
All lessons	Communication 2	Compare what is heard with prior knowledge and experience.
All lessons	Communication 3	Follow simple oral directions.
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All lessons	Communication 4	Speak clearly and understandably.	
All lessons	Communication 5	Deliver brief informational presentations that: demonstrate an understanding of the topic; include and sort relevant information and details to develop topic; organize information with a clear beginning and ending; and express opinions.	
	Grade 2		
Lesson	Standard	Description	
2, 3, 4, 6	Reading Process 1	Establish a purpose for reading (e.g., to be informed, to follow directions or to be entertained).	
1, 4, 6	Reading Process 2	Predict content, events and outcomes from illustrations and prior experience and support those predictions with examples from the text or background knowledge.	
1, 4, 6	Reading Process 3	Compare and contrast information in texts with prior knowledge and experience.	
1, 4, 6	Reading Process 4	Summarize text by recalling main ideas and some supporting details.	
1	Reading Process 5	Create and use graphic organizers, such as Venn diagrams and webs, to demonstrate comprehension.	
1, 4, 6	Reading Process 6	Answer literal, inferential and evaluative questions to demonstrate comprehension of grade-appropriate print texts and electronic and visual media.	
4	Reading Applications 2	Arrange events from informational text in sequential order.	
4	Reading Applications 3	List questions about essential elements from informational text (e.g., why, who, where, what, when and how) and identify answers.	
4	Reading Applications 4	Classify ideas from informational texts as main ideas or supporting details.	
1, 2, 3, 4, 6	Reading Applications 6	Analyze a set of directions for proper sequencing.	
All lessons	Writing Process 1	Generate writing ideas through discussions with others.	
All lessons	Writing Process 2	Develop a main idea for writing.	
All lessons	Writing Process 3	Develop a purpose and audience for writing.	
All lessons	Writing Process 5	Organize writing with a developed beginning, middle and end.	

All lessons	Writing Process 15	Rewrite and illustrate writing samples for display and for sharing with others.
1, 4	Writing Applications 2	Write responses to stories by comparing text to other texts, or to people or events in their own lives.
All lessons	Writing Applications 4	Produce informal writings (e.g., messages, journals, notes and poems) for various purposes.
All lessons	Writing Conventions 1	Print legibly, and space letters, words and sentences appropriately.
All lessons	Writing Conventions 3	Spell regularly used and high frequency words correctly.
1, 2, 3	Research 1	Create questions for investigations, assigned topic or personal area of interest.
All lessons	Research 3	Acquire information, with teacher assistance, from multiple sources (e.g., books, magazines, videotapes, CD-ROMs, Web sites) and collect data (e.g., interviews, experiments, observations or surveys) about the topic.
All lessons	Research 4	Identify important information and write brief notes about the information.
All lessons	Research 6	Report information to others.
All lessons	Communication 1	Use active listening skills, such as making eye contact or asking questions.
All lessons	Communication 2	Compare what is heard with prior knowledge and experience.
All lessons	Communication 3	Identify the main idea of oral presentations and visual media.
All lessons	Communication 4	Follow two- and three-step oral directions.
All lessons	Communication 6	Select language appropriate to purpose and use clear diction and tone.
All lessons	Communication 8	Deliver informational presentations that: present events or ideas in logical sequence and maintain a clear focus; demonstrate an understanding of the topic; include relevant facts and details to develop a topic; organize information with a clear beginning and ending; include diagrams, charts or illustrations as appropriate; and identify sources.

Ohio Academic Content Standards for Mathematics - Grades 1 & 2

	Grade 1	
Lesson	Standard	Description
2, 3, 5	Number, Number Sense, and Operations 10	Model, represent and explain addition as combining sets (part + part = whole) and counting on.
3	Measurement 5	Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet.
2, 3	Geometry and Spatial Sense 4	Extend the use of location words to include distance (near, far, close to) and directional words (left, right).

2	Patterns, Functions and Algebra 1	Sort, classify and order objects by two or more attributes, such as color and shape, and explain how objects were sorted.	
2	Patterns, Functions and Algebra 5	Describe orally and model a problem situation using words, objects or number phrase or sentence.	
2	Data Analysis and Probability 1	Identify multiple categories for sorting data.	
2	Data Analysis and Probability 2	Collect and organize data into charts using tally marks.	
2, 3	Data Analysis and Probability 3	Display data in picture graphs with units of 1 and bar graphs with intervals of 1.	
2, 3	Data Analysis and Probability 4	Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions.	
2	Data Analysis and Probability 7	Answer questions about the number of objects represented in a picture graph, bar graph or table graph; e.g., category with most, how many more in a category compared to another, how many altogether in two categories.	
	Grade 2		
Lesson	Standard	Description	
3	Measurement 5	Estimate and measure the length and weight of common objects, using metric and U.S. customary units, accurate to the nearest unit.	
2	Patterns, Functions and Algebra 5	Use objects, pictures, numbers and other symbols to represent a problem situation.	
2, 3, 5	Patterns, Functions and Algebra 7	Describe qualitative and quantitative changes, especially those involving addition and subtraction; e.g., a student growing taller versus a student growing two inches in one year.	
2	Data Analysis and Probability 1	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	
2	Data Analysis and Probability 2	Read, interpret and make comparisons and predictions from data represented in charts, line plots, picture graphs and bar graphs.	
2, 3	Data Analysis and Probability 4	Write a few sentences to describe and compare categories of data represented in a chart or graph, and make statements about the data as a whole.	
2	Data Analysis and Probability 5	Identify untrue or inappropriate statements about a given set of data.	
3	Analysis and Probability 7	List some of the possible outcomes of a simple experiment, and predict whether given outcomes are more, less or equally likely to occur.	

02/2007 Ohio Academic Content Standards: http://www.ode.state.oh.us/academic content standards/
National Health Standards: http://www.aahperd.org/aahe/pdf files/standards.pdf#search=%22national%20health%20standards%22

National Health Education Standards – Grades Pre-K– 2: cited from pre-publication document of National Health Education Standards, Pre K-12, American Cancer Society, December 2005 – August 2006

Lesson	Standard	Performance Indicator	
3, 4, 5, 6	1.2.1	Identify that healthy behaviors impact personal health.	
3, 5, 6	1.2.5	Describe why it is important to seek health care.	
3, 5	2.2.1	Identify how the family influences personal health practices and behaviors.	
3, 5	3.2.1	Identify trusted adults and professionals who can help promote health.	
3, 4, 5, 6	4.2.2	Demonstrate listening skills to enhance health.	
3, 5	6.2.1	Identify a short-term personal health goal and take action toward achieving the goal.	
3, 4, 5	7.2.1	Demonstrate healthy practices and behaviors to maintain or improve personal health.	
3, 4, 5	7.2.2	Demonstrate behaviors to avoid or reduce health risks.	
3, 4, 5, 6	8.2.2	Encourage peers to make positive health choices.	
3, 5, 6	8.8.4	Identify ways that health messages and communication techniques can be altered for different audiences.	