## Object Lessons® Digging Archaeology
## National Science Education Standards Correlation: Grades K-4

| Fundamental Concepts and Understandings | | Digging Archaeology |
|---|---|---|
| **Science as Inquiry** | | |
| Abilities necessary to do scientific inquiry | Ask a question about objects, organisms, and events in the environment. | Investigation 1, 2, 3, 4, 6, |
| | Plan and conduct a simple investigation. | Investigation 1, 2, 3, 4 |
| | Employ simple equipment and tools to gather data and extend the senses. | Investigation 1, 2, 3, 4 |
| | Use data to construct reasonable explanation. | Investigation 1, 2, 4, 5, 6 |
| | Communicate investigations and explanations. | Investigation 1, 2, 3, 4, 5, 6 |
| **Physical Science** | | |
| Properties of objects and materials | Objects have observable properties that can be measured using tools. | Investigation 2, 4 |
| Position and motion of objects | The position of an object can be described by locating it relative to another object or the background. | Investigation 1, 3, 4 |
| **Life Science** | | |
| The characteristics of organisms | Plants require air, water, nutrients, and light; organisms can survive only in environments in which their needs can be met. | Investigation 4 |
| Organisms in their environments | All organisms cause changes in the environment where they live. Some of these changes are detrimental to the organism or other organisms, whereas others are beneficial. | Investigation 2, 4 |
| | Humans depend on their natural and constructed environments. | Investigation 2, 5 |
| **Earth and Space Science** | | |
| Properties of Earth materials | Soils have properties of color and texture, capacity to retain water, and ability to support the growth of many kinds of plants, including those in our food supply. | Investigation 3 |
| **Unifying Concepts and Processes** | | |
| Systems, order, and organization | A system is an organized group of related objects or components that form a whole. | Investigation 1, 4, 5, 6 |
| Evidence, models, and explanation | Evidence consists of observations and data on which to base scientific explanations. | Investigation 1, 2, 5, 6 |
| | Models are tentative schemes or structures that correspond to real objects, events, or classes of events, that have explanatory power. | Investigation 2, 3, 4, 6, 7 |
| | Scientific explanations incorporate existing scientific knowledge and new evidence from observations, experiments, or models into internally consistent, logical statements. | Investigation 2, 4, 5, 6 |
| Form and function | Form and function are complementary aspects of objects, organisms, and systems in the natural and designed world. | Investigation 5, 6 |

## Object Lessons® Digging Archaeology
## National Science Education Standards Correlation: Grades 5-8

| Fundamental Concepts and Understandings | | Digging Archaeology |
|---|---|---|
| **Science as Inquiry** | | |
| Abilities necessary to do scientific inquiry | Identify questions that can be answered through scientific investigation. | Investigation 1, 2, 5 |
| | Design and conduct a scientific investigation. | Investigation 1, 4 |

| | | |
|---|---|---|
| | Use appropriate tools and techniques to gather, analyze, and interpret data. | Investigation 1, 2, 3, 4, 5 |
| | Develop descriptions, explanations, predictions, and models using evidence. | Investigation 1, 2, 3, 4, 5, |
| | Think critically and logically to make the relationships between evidence and explanations. | Investigation 1, 2, 3, 4, 5, 6, 7 |
| | Recognize and analyze alternative explanations and predictions. | Investigation 2, 4, 6 |
| | Communicate scientific procedures and explanations. | Investigation 2, 3, 4, 5, 6 |
| | Use mathematics in all aspects of scientific inquiry. | Investigation 1, 2, 3, 4, 5, 7 |
| **Life Science** | | |
| Regulation and behavior | All organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment. | Investigation 4 |
| Populations and ecosystems | Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. | Investigation 2 |
| **Earth and Space Science** | | |
| Structure of the earth system | Constructive forces include crystal deformation, volcanic eruption, and deposition of sediment, while destructive forces include weathering and erosion. | Investigation 2 |
| | Soils are often found in layers with each having a different chemical composition and texture. | Investigation 3 |
| **Unifying Concepts and Processes** | | |
| Systems, order, and organization | A system is an organized group of related objects or components that form a whole. | Investigation 1, 4, 5, 6 |
| Evidence, models, and explanation | Evidence consists of observations and data on which to base scientific explanations. | Investigation 1, 2, 4, 5, 6 |
| | Models are tentative schemes or structures that correspond to real objects, events, or classes of events, that have explanatory power. | Investigation 2, 3, 4, 6, 7 |
| | Scientific explanations incorporate existing scientific knowledge and new evidence from observations, experiments, or models into internally consistent, logical statements. | Investigation 2, 4, 5, 6 |
| Form and function | Form and function are complementary aspects of objects, organisms, and systems in the natural and designed world. | Investigation 5, 6 |