

Correlation of  
*Seeds of Science/Roots of Reading*<sup>®</sup>  
Integrated Science and Literacy Units

with the State of NORTH DAKOTA  
Science Standards  
for Grade 3

Created MARCH 2010



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North Dakota Science Standards – 3 <sup>rd</sup> Grade	2 <sup>nd</sup> - 3 <sup>rd</sup> Grade				3 <sup>rd</sup> - 4 <sup>th</sup> Grade				4 <sup>th</sup> - 5 <sup>th</sup> Grade			
	Soil Habitats	Shoreline Science	Designing Mixtures	Gravity & Magnetism	Light Energy	Weather & Water	Variation and Adaptation	Digestion & Body Systems	Planets & Moons	Aquatic Ecosystems	Models of Matter	Chemical
<b>STANDARD 1: Students understand the unifying concepts and processes of science.</b>												
MODELS												
<i>No benchmark expectations at this level</i>												
SYSTEMS												
<i>No benchmark expectations at this level</i>												
CONSTANCY AND CHANGE												
3.1.1. Identify changes that are repetitive (e.g., seasons, day and night, water cycle)						● ● ●			● ● ●			
<b>STANDARD 2: Students use the process of science inquiry.</b>												
ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY												
3.2.1. Select appropriate scientific tools (i.e., magnifiers, thermometers, rulers, balances) for investigations	● ●	● ●	● ●	●	● ●	● ●			● ●	● ● ●	● ●	● ●
3.2.2. Ask questions directly related to a scientific investigation	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ●
3.2.3. Record observations (e.g., journals, drawings, charts) based on simple investigations	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ●
<b>STANDARD 3: Students understand the basic concepts and principles of physical science.</b>												
PROPERTIES OF MATTER												

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3.3.1. Identify the physical properties of solids and liquids			● ●			● ● ●					● ● ●	● ●
<b>FORCE AND MOTION</b>												
3.3.2. Identify a force as push or pull				● ● ●					● ●			
3.3.3. Describe how magnets attract iron and repel or attract other magnets				● ● ●								
<b>FORMS OF ENERGY</b>												
3.3.4. Explain how sound is produced by vibration												
3.3.5. Describe how the path of light tends to maintain its direction and motion until it encounters an object					● ● ●							
<b>STANDARD 4: Students understand the basic concepts and principles of life science.</b>												
<b>CHARACTERISTICS OF ORGANISMS</b>												
<i>No benchmark expectations at this level</i>												
<b>STRUCTURE AND FUNCTION</b>												

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3.4.1. Identify parts of an organism that have specific functions (e.g., roots absorb water, heart pumps blood)	● ● ●	● ● ●					● ● ●			● ● ●		
<b>LIFE CYCLES</b>												
3.4.2. Describe the life cycles of plants and animals (e.g., birds, mammals, grasses, trees, insects, flowers)												
<b>ORGANISMS AND THEIR ENVIRONMENTS</b>												
3.4.3. Identify the needs of living things (e.g., food, shelter, soil, space, water)	● ●	● ●					● ●			● ●		
<b>STANDARD 5: Students understand the basic concepts and principles of earth and space science.</b>												
<b>WEATHER, SEASONS, AND CLIMATE</b>												
3.5.1. Identify weather conditions that can be measured (e.g., temperature, wind direction and speed, and precipitation)						● ● ●						
<b>EARTH'S SURFACE</b>												

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3.5.2. Identify different uses (e.g., building materials, sources of fuel) of Earth’s materials based on their properties												
3.5.3. Identify ways (e.g., wind, rain, people) that larger rocks break down into smaller rocks		● ● ●										
3.5.4. Identify the properties of soil (e.g., color, texture, ability to support plant growth, capacity to retain water)	● ● ●											
<b>OBJECTS IN THE SKY</b>												
3.5.5. Explain how stars are like the Sun, but because they are at a great distance, they look like small points of light					●				● ●			
<b>STANDARD 6: Students understand relations between science and technology.</b>												
<b>FORMS OF TECHNOLOGY</b>												
<i>No benchmark expectations at this level</i>												
<b>TECHNOLOGICAL DESIGN</b>												

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3.6.1. Identify ways technology (e.g., zippers, Velcro, measuring instruments, computers) can be used to solve problems at home and school					● ●	● ● ●			● ●			
<b>STANDARD 7: Students understand relations between science and personal, social, and environmental issues.</b>												
SCIENCE AND PERSONAL HEALTH												
3.7.1. Identify ways to prevent the spread of germs.												
SCIENCE AND ENVIRONMENTAL ISSUES												
3.7.2. Identify the benefits of recycling, reusing, and reducing		● ●								● ●		
SCIENCE AND SOCIAL ISSUES												
<i>No benchmark expectations at this level</i>												
<b>STANDARD 8: Students understand the history and nature of science.</b>												
PEOPLE IN SCIENCE												

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3.8.1. Identify ways people of all ages, genders, and backgrounds use science in their careers and in daily life (e.g., children check temperature conditions to decide what to wear, farmer uses genetic grains, hikers use GPS, depth-finder in boat, hearing-aides for disabilities)	● ● ●	● ●	● ● ●	● ●	● ●	● ● ●	● ●	● ●	● ●	● ●	● ●	●

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