

Correlation of
Seeds of Science/Roots of Reading[®]
Integrated Science and Literacy Units

with the State of Tennessee
Science Standards
for Grade 6

Created August 2011



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TN Science Standards – 6 th Grade	2 nd - 3 rd Grade				3 rd - 4 th Grade				4 th - 5 th 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 Changes
Embedded Inquiry												
1. Design and conduct open-ended scientific investigations.					•	••				•••	••	•••
2. Use appropriate tools and techniques to gather, organize, analyze, and interpret data.					•••	•••	••	••	•••	•••	•••	•••
3. Synthesize information to determine cause and effect relationships between evidence and explanations.					•••	•••	•••	•••	•••	•••	•••	•••
4. Recognize possible sources of bias and error, alternative explanations, and questions for further exploration.					••		•	•	•	•	•	•
5. Communicate scientific understanding using descriptions, explanations, and models.					•••	•••	••	•••	•••	•••	•••	•••
Embedded Technology & Engineering												
1. Explore how technology responds to social, political, and economic needs.					•	•		•	•••	•	•	

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2. Know that the engineering design process involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting.					•	•		• • •	• • •			
3. Compare the intended benefits with the unintended consequences of a new technology.												
4. Describe and explain adaptive and assistive bioengineered products.												
Life Science												
Standard 1 – Cells												
Not addressed at this grade level.												
Standard 2 – Interdependence												
1. Examine the roles of consumers, producers, and decomposers in a biological community.										• • •		
2. Describe how matter and energy are transferred through an ecosystem.										• • •		

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3. Draw conclusions from data about interactions between the biotic and abiotic elements of a particular environment.							• •		• •			
4. Analyze the environments and the interdependence among organisms found in the world’s major biomes.							•		•			
Standard 3 – Flow of Matter and Energy												
Not addressed at this grade level.												
Standard 4 – Heredity												
Not addressed at this grade level.												
Standard 5 – Biodiversity and Change												
Not addressed at this grade level.												
Earth and Space Science												
Standard 6 – The Universe												
1. Analyze information about the major components of the universe.									• •			
2. Describe the relative distance of objects in the solar system from earth.									• • •			

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3. Explain how the positional relationships among the earth, moon, and sun control the length of the day, lunar cycle, and year.									• • •			
4. Describe the different stages in the lunar cycle.									• • •			
5. Produce a model to demonstrate how the moon produces tides.												
6. Illustrate the relationship between the seasons and the earth-sun system.												
7. Describe the causes of lunar and solar eclipses.												
Standard 7 – The Earth												
Not addressed at this grade level.												
Standard 8 – The Atmosphere												
1. Design and conduct an investigation to determine how the sun drives atmospheric convection.												
2. Describe how the sun’s energy produces the wind.												
3. Investigate the relationship between currents and oceanic temperature differences.												
4. Analyze meteorological data to predict weather conditions.												
Physical Science												

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Standard 9 – Matter												
Not addressed at this grade level.												
Standard 10 – Energy												
1. Compare and contrast the three forms of potential energy.												
2. Analyze various types of energy transformations.												
3. Explain the principles underlying the Law of Conservation of Energy.												
Standard 11 – Motion												
Not addressed at this grade level.												
Standard 12 – Forces In Nature												
1. Describe how simple circuits are associated with the transfer of electrical energy.												
2. Explain how simple electrical circuits can be used to determine which materials conduct electricity.												

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