

**ARLINGTON ISD**  
**TAKS Instructional/Assessment Timeline**

**Grade 4 SCIENCE\*\***  
**2009-2010**

<b>Objectives/TEKS Student Expectations</b>	<b>Mini-Test</b>	<b>EOY Test</b>
<b>Objective 1: The student will demonstrate an understanding of the nature of science</b>		
[4.1a] Demonstrate safe practices during field and laboratory investigations	X	
[4.2a] Plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology		X
[4.2b] Collect information by observing and measuring	X	X
[4.2c] Analyze and interpret information to construct reasonable explanations from direct and indirect evidence	X	X
[4.2d] Communicate valid conclusions	X	X
[4.2e] Construct simple graphs, tables, maps, and charts to organize, examine, and evaluate information	X	X
[4.3a] Analyze, review, scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information		X
[4.3b] Draw inferences based on information related to promotional materials for products and services		X
[4.3c] Represent the natural world using models and identify their limitations		X
[4.4a] Collect and analyze information using tools including calculators, safety goggles, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, meter sticks, timing devices, balances, and compasses	X	X
<b>Objective 2: The student will demonstrate an understanding of the life sciences</b>		
[4.5a] Identify and describe the roles of some organisms in living systems such as <del>plants in a schoolyard, and parts in nonliving systems such as light bulb in a circuit</del>	X	
[4.5b] Predict and draw conclusions about what happens when part of a system is removed	X	
[4.6a] Identify patterns of change such as weather, metamorphosis, [and objects in the sky]	X	
[4.8a] Identify characteristics that allow members within a species to survive and reproduce	X	
[4.8b] Compare adaptive characteristics of various species	X	
[4.10a] Identify and observe effects of events that require time for changes to be noticeable <del>including growth, erosion, dissolving, weathering, and flow</del>	X	
[4.9a] Distinguish between inherited traits and learned characteristics	X	
[4.9a] Identify and provide examples of inherited traits and learned characteristics	X	
<b>Objective 3: The student will demonstrate an understanding of the physical sciences</b>		
[4.5a] Identify and describe the roles of <del>some organisms in living systems such as plants in a schoolyard, and parts in nonliving systems such as light bulb in a circuit</del>		X
[4.5b] Predict and draw conclusions about what happens when part of a system is removed		X
[4.7a] Observe and record changes in the states of matter caused by the addition or reduction of heat		X
[4.7b] Conduct tests, compare data, and draw conclusions about physical properties of matter including states of matter, conduction, density, and buoyancy		X

Grade 4 Science, continued

Objectives/TEKS Student Expectations	Mini-Test	EOY Test
<b>Objective 4: The student will demonstrate an understanding of the earth sciences</b>		
[4.6a] Identify patterns of change such as in <b>weather, metamorphosis, and objects in the sky</b>	X	
[4.10a] Identify and observe effects of events that require time for changes to be noticeable including <b>growth, erosion, dissolving, weathering, and flow</b>		X
4.10b Draw conclusions about "what happened before" using fossils or charts and tables		X
[4.11a] Test properties of soils including texture, capacity to retain water, and ability to support life	X	
[4.11b] Summarize the effects of the oceans on land		X
[4.11c] Identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle		X

**Bolded** items indicate the specific concepts that may be tested under the designated TAKS objective.

\*\* While the purpose of this Instructional Timeline is to focus instruction on specific TEKS, teachers are responsible for teaching all fourth grade TEKS. Teachers should continue review of the specific TEKS throughout the instructional year.