

Houghton Mifflin Harcourt *ScienceFusion* Student Edition ©2012
Grade 1

correlated to the

Minnesota Academic Standards
Science Grade 1

Standards		Page Citations	
1.1. The Nature of Science and Engineering			
1.1.1. The Practice of Science			
1.1.1.1. Scientists work as individuals and in groups to investigate the natural world			
1.1.1.1.1	When asked "How do you know?," students support their answer with observations. <i>For example:</i> Use observations to tell why a squirrel is a living thing.	SE:	18, 24, 28, 30–34, 36, 141–142, 189–190, 267–268, 349
		Flipchart:	2, 3, 11, 17, 27, 33
1.1.1.1.2	Recognize that describing things as accurately as possible is important in science because it enables people to compare their observations with those of others.	SE:	18, 24, 28, 30–34, 40, 303–304, 391
		Flipchart:	3, 4, 5, 9, 20, 40
1.1.3. Interactions Among Science, Technology Engineering, Mathematics, and Society			
1.1.3.1. Designed and natural systems exist in the world. These systems are made up of components that act within a system and interact with other systems.			
1.1.3.1.1	Observe that many living and nonliving things are made of parts and that if a part is missing or broken, they may not function properly.	SE:	49–56, 62–63, 144–147, 150, 152, 249, 408
		Flipchart:	4, 9, 14, 18, 23, 31, 39, 45, 51
1.1.3.2. Men and women throughout the history of all cultures, including Minnesota American Indian tribes and communities, have been involved in engineering design and scientific inquiry.			
1.1.3.2.1	Recognize that tools are used by people, including scientists and engineers, to gather information and solve problems. <i>For example:</i> Magnifier, snowplow and calculator.	SE:	8–12, 14, 27, 49–56, 59–60, 69, 75, 105–106, 153–154, 249, 260–263, 265, 285–286, 317–318, 337, 363, 391, 407
		Flipchart:	4, 6, 9, 13, 21, 24, 26, 32, 35, 39, 40, 42, 45, 51

Standards		Page Citations	
1.3. Earth and Space Science			
1.3.1. Earth Structure and Processes			
1.3.1.3. Earth materials include solid rocks, sand, soil and water. These materials have different observable physical properties that make them useful.			
1.3.1.3.1	Group or classify rocks in terms of color, shape and size.	SE:	212–213, 221
		Flipchart:	3, 10, 27
1.3.1.3.2	Describe similarities and differences between soil and rocks. <i>For example:</i> Use screens to separate components of soil and observe the samples using a magnifier.	SE:	134, 205, 209, 212–217, 223–224
		Flipchart:	6, 28
1.3.1.3.3	Identify and describe large and small objects made of Earth materials.	SE:	64–67, 70, 72, 74, 76, 202, 204, 337
		Flipchart:	9, 27
1.4. Life Science			
1.4.1. Structure and Function in Living Systems			
1.4.1.1. Living things are diverse with many different observable characteristics.			
1.4.1.1.1	Describe and sort animals into groups in many ways, according to their physical characteristics and behaviors.	SE:	108–116, 118–120, 177, 179
		Flipchart:	4, 14, 15
1.4.2. Interdependence Among Living Systems			
1.4.2.1. Natural systems have many components that interact to maintain the living system.			
1.4.2.1.1	Recognize that animals need space, water, food, shelter and air.	SE:	84, 94–98, 100–102, 123, 176–184, 191–192, 230
		Flipchart:	4, 12, 24
1.4.2.1.2	Describe ways in which an animal's habitat provides for its basic needs. <i>For example:</i> Compare students' houses with animal habitats.	SE:	96–98, 100–102, 173, 176–184, 191–192
		Flipchart:	4, 12, 23, 24

Standards		Page Citations
1.4.3. Evolution in Living Systems		
1.4.3.1. Plants and animals undergo a series of orderly changes during their life cycles.		
1.4.3.1.1	Demonstrate an understanding that animals pass through life cycles that include a beginning, development into adults, reproduction and eventually death. <i>For example:</i> Use live organisms or pictures to observe the changes that occur during the life cycle of butterflies, meal worms or frogs.	SE: 84, 97, 110–111 Flipchart: 4, 12, 24
1.4.3.1.2	Recognize that animals pass through the same life cycle stages as their parents.	SE: 84, 97, 110–111 Flipchart: 4, 12, 24