To the Parent(s):

After registration is complete, your child may take the online Credit by Examination for SCI K.

ABOUT THE EXAM

The examination for Kindergarten Science consists of 50 multiple choice questions. The exam is based on the Texas Essential Knowledge and Skills (TEKS) for this subject. The full list of TEKS is included in this document (it is also available online at the Texas Education Agency website). The TEKS outline specific topics covered in the exam, as well as more general areas of knowledge and levels of critical thinking. Use the TEKS to focus your study in preparation for the exam. TEKS covered in this semester are indicated by a checkmark; the exam will focus on the checkmarked TEKS, but may touch on any of the full list.

The examination will take place under supervision, and the recommended time limit is three hours. You may not use any notes or books. A percentage score from the examination will be reported to the official at your school.

In preparation for the examination, review the TEKS for this subject. It is important to prepare adequately. Any textbook from the Texas Adoption list can be used for a review.

Good luck on your test!

CBE Exam Preparation

Review the TEKS for Kindergarten Science to familiarize your child with the basic format of the exam. You can also review the information in the following literature selections. They can be found at your public library.

- Alexander, Martha, Where Does the Sky End, Grandpa?
- Aliki, *My Five Senses*
- Anno, *Anno's Counting Book*
- Asch, Frank, *The Earth and I*
- Asch, Frank, *Water*
- Baker, Keith, *Hide and Snake*
- Bang, Molly, *Ten, Nine, Eight*
- Banks, Kate, *Close Your Eyes*
- Banyai, Istuan, *Zoom*

- Barton, Byron, *Building a House*
- Barton, Byron, *Machines at Work*
- Black, Christine, and Barrie Watts, *Bean and Plant*
- Blake, Robert J., *The Perfect Spot*
- Bornhard, Emery and Durga, *The Way of the Willow Branch*
- Bransfield, Jean, *Splish Splash*
- Briggs, Raymond, *The Snowman*
- Brown, Craig, *In the Spring*
- Butrom, Ray, *A Raindrop Hit My Nose*
- Byars, Betsy, *Ant Plays Bear*
- Cannon, Janell, *Stellaluna*
- Casey, Denise, *Weather Everywhere*
- Chaconas, Dori, *One Little Mouse*
- Challand, Helen, *Experiments with Magnets*
- Challoner, Jack, *Floating and Sinking*
- Chapman, Cheryl, *Snow on Snow on Snow*
- Chermayeff, Ivan, *Furry Facts*
- Chermayeff, Ivan, *Scaly Facts*
- Chormayoff, Ivan, *Feathery Facts*
- Christelow, Eileen, *Five Little Monkeys Jumping on the Bed*
- Cole, Henry, *Jack's Garden*
- Crewe, Sabrina, *Hills and Mountains*
- Crews, Donald, *Sail Away*
- Crews, Nina, *One Hot Summer Day*
- DeBourgoing, Pascale, and Gallimard Jeunesse, *Fruit (First Discovery Book)*
- Demuth, Brennan, *Those Amazing Ants*
- dePaola, Tomie, *A New Barker in the House*
- dePaola, Tomie, *The Cloud Book*
- Dodds, Dayle Ann, *Wheel Away!*
- Eastman, P.D., *Are You My Mother?*
- Ehlert, Lois, *Planting a Rainbow*
- Ehlert, Lois, *Eating the Alphabet*
- Ehlert, Lois, *Red Leaf, Yellow Leaf*

- Ets, Marie Hall, *Gilberto and the Wind*
- Fleming, Denise, *In the Tall, Tall Grass*
- Fleming, Denise, *Mama Cat Has Three Kittens*
- Fleming, Denise, *Where Once There Was a Wood*
- Fowler, Allan, *It Could Still Be a Lake*
- Fowler, Allan, *It Could Still Be a Leaf*
- Fowler, Allan, *It Could Still Be a Rock*
- Fowler, Allan, *It Could Still Be Water*
- Fowler, Allan, *What Magnets Can Do*
- Fox, Mem, *Koala Lou*
- Fox, Mem, *Whoever You Are*
- Garland, Sherry, *Summer Sands*
- Gauch, Patricia Lee, *Christina Katerina & the Box*
- George, Lindsay Barrett, *In the Snow: Who's Been Here?*
- Gibbons, Gail, *From Seed to Plant*
- Gibbons, Gail, *The Seasons of Arnold's Apple Tree*
- Gibbons, Gail, *Tool Book*
- Gilliland, Judith Heide, *River*
- Ginsburg, Mirra, *Mushroom in the Rain*
- Gordon, Maria, *Sink and Float*
- Greenaway, Theresa, and Ann Savage, *Beaks and Noses (Head to Tail)*
- Greenaway, Theresa, and Ann Savage, *Fur and Feathers (Head to Tail)*
- Greenaway, Theresa, and Ann Savage, *Paws and Claws (Head to Tail)*
- Greenaway, Theresa, and Ann Savage, *Teeth and Tusks (Head to Tail)*
- Greenway, Shirley, *How Do I Move? (Animals Q&A Series)*
- Gretz, Susanna, *Rabbit Rambles On*
- Guarino, Deborah, *Is Your Mama a Llama?*
- Heiligman, Deborah, *From Caterpillar to Butterfly*
- Henderson, Kathy, *The Little Boat*
- Hewitt, Sally, *The Five Senses*
- Hoban, Tana, *A Children's Zoo*
- Hoban, Tana, *Is It Red? Is It Yellow? Is It Blue?*
- Hort, Lenay, *How Many Stars in the Sky?*

- Hubbard, Eric, *My Friend Rabbit*
- Hutchins, Pat, *Rosie's Walk*
- Kalan, Robert, *Rain*
- Keats, Jack Ezra, *First Snow*
- Kellogg, Steven, *Can I Keep Him?*
- King, Elizabeth, *Backyard Sunflower*
- King, Elizabeth, *The Pumpkin Patch*
- Krull, Kathleen, *It's My Earth, Too*
- L'Hommedieu, Arthur J., *From Plant to Blue Jeans: A Photo Essay (Changes)*
- Lember, Barbara H., *A Book of Fruit*
- Lionni, Leo, *Swimmy*
- Llewellyn, Claire, *Mighty Machines: Trucks*
- Makie, Sandra, *A Rainy Day*
- Marshall, Edward, *Three by the Sea*
- Martin, Bill Jr., and John Archambault, *Chicka Chicka Boom Boom*
- Martin, Bill, *Brown Bear, Brown Bear, What Do You See?*
- Martin, Linda, *Watch Them Grow*
- Mason, Jane, Bruce Degen, and Janna Cole, *Magic School Bus Ups and Downs: A Book About Floating*
- McCloskey, Robert, *Make Way for Ducklings*
- McMillan, Bruce, *Counting Wildflowers*
- McMillan, Bruce, *Going on a Whale Watch*
- McPhail, David, *Fix-It*
- Miller, Margaret, *My Five Senses*
- Morris, Ann, *The Animal Book (World's Family Series)*
- Moss, Lloyd, *Zin! Zin! Zin! The Violin*
- Muller, Gerda, *Circle of Seasons*
- Munsch, Robert, *Thomas' Snowsuit*
- Neitzel, Shirley, *The Jacket I Wear in the Snow*
- Oppenheim, Joanne. *Have You Seen Trees?*
- Otto, Carolyn, *I Can Tell by Touching*
- Peters, Lisa Westberg, *The Sun, the Wind, and the Rain*
- Peters, Lisa Westberg, *Water's Way*

- Pfeffer, Wendy, *A Log's Life*
- Pfeffer, Wendy, *Marta's Magnets*
- Plourde, Lynn, *Pigs in the Mud in the Middle of the Road*
- Powell, Julian, *Jumpers (Things That Move)*
- Poydar, Nancy, *Snip, Snip…Snow*
- Ray, Mary Lyn, *Mud*
- Reidel, Mariene, *From Ice to Rain*
- Robbins, Ron, *Autumn Leaves*
- Robinson, Fay, *Where Do Puddles Go?*
- Rockwell, Anne F., *One Bean*
- Roots, Phyllis, *Oliver Finds His Way*
- Rotner, Shelly, *Boats Afloat*
- Royston, Angela, *Big Machines*
- Royston, Angela, *Diggers and Dump Trucks*
- Saunders-Smith, Gail, *Animals in the Fall*
- Schmid, Eleonore, *The Air Around Us*
- Schoenherr, John, *Rebel*
- Sekido, Isamu, *Fruits, Roots, and Fungi: Plants We Eat*
- Serfozo, Mary, *Who Said Red?*
- Shaw, Nancy, *Sheep in a Jeep*
- Sill, Cathryn P., *About Birds: A Guide for Children*
- Sill, Cathryn P., *About Mammals: A Guide for Children*
- Silver, Donald M., *The Night Sky (One Small Square)*
- Simon, Norma, *Wet World*
- Slawson, Michele Benoit, *Apple Picking Time*
- Tafuri, Nancy, *Have You Seen My Duckling?*
- Tafuri, Nancy, *Spots, Feathers, and Curly Tails*
- Taylor, Helen, *You'd Never Believe It But Water Has a Skin, and Other Facts about Water*
- Turkle, Brinton, *Deep in the Forest*
- Vandine, Joann, *I Eat Leaves*
- Waddell, Martin, *Owl Babies*
- Waddell, Martin, *The Pig in the Pond*
- Watty, Piper, *The Little Engine That Could*

- Wildsmith, Brian, *Animal Seasons*
- Williams, Sue, *I Went Walking*
- Winthrop, Elizabeth, *Shoes*
- Yagelski, Robert, *The Day the Lifting Bridge Stuck*
- Yolen, Jane, *Before the Storm*
- Zelinsky, Paul, *The Wheels on the Bus*
- Zolotow, Charlotte, *When the Wind Stops*

Texas Essential Knowledge and Skills
SCI K – Science, Kindergarten

TTU K-12: SCI K CBE, v.3.0	
TEKS §112.10 - Science, K-5 Elementary	
TEKS Requirement (Elementary)	**TEKS Covered**
§112.11. Science, Kindergarten, Adopted 2017.	
(a) Introduction.	
(1) In Kindergarten, students observe and describe the natural world using their senses. Students do science as inquiry in order to develop and enrich their abilities to understand scientific concepts and processes. Students develop vocabulary through their experiences investigating properties of common objects, earth materials, and organisms.	
(A) A central theme throughout the study of scientific investigation and reasoning; matter and energy; force, motion, and energy; Earth and space; and organisms and environment is active engagement in asking questions, creating a method to answer those questions, answering those questions, communicating ideas, and exploring with scientific tools. Scientific investigation and reasoning involves practicing safe procedures, asking questions about the natural world, and seeking answers to those questions through simple observations used in descriptive investigations.	
(B) Matter is described in terms of its physical properties, including relative size, weight, shape, color, and texture. The importance of light, thermal, and sound energy is identified as it relates to the students' everyday life. The location and motion of objects are explored.	
(C) Weather is recorded and discussed on a daily basis so students may begin to recognize patterns in the weather. Other patterns are observed in the appearance of objects in the sky.	
(D) In life science, students recognize the interdependence of organisms in the natural world. They understand that all organisms have basic needs that can be satisfied through interactions with living and nonliving things. Students will investigate the life cycle of plants and identify likenesses between parents and offspring.	
(2) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process."	
(3) Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include patterns, cycles, systems, models, and change and constancy.	
(4) The study of elementary science includes planning and safely implementing classroom and outdoor investigations using scientific processes, including inquiry methods, analyzing information, making informed decisions, and using tools to collect and record information, while addressing the major concepts and vocabulary, in the context of physical, earth, and life sciences. Districts are encouraged to facilitate classroom and outdoor investigations for at least 80% of instructional time.	
(5) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.	
(b) Knowledge and skills.	
(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices. The student is expected to:	
(A) identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately; and	✓
(B) demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reusing or recycling paper, plastic, and metal.	✓
(2) Scientific investigation and reasoning. The student develops abilities to ask questions and seek answers in classroom and outdoor investigations. The student is expected to:	
(A) ask questions about organisms, objects, and events observed in the natural world;	✓
(B) plan and conduct simple descriptive investigations;	✓
(C) collect data and make observations using simple tools;	✓

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TEKS §112.10 - Science, K-5 Elementary	
TEKS Requirement (Elementary)	**TEKS Covered**
(D) record and organize data and observations using pictures, numbers, and words; and	✓
(E) communicate observations about simple descriptive investigations.	✓
(3) Scientific investigation and reasoning. The student knows that information and critical thinking are used in scientific problem solving. The student is expected to:	
(A) identify and explain a problem such as the impact of littering and propose a solution;	✓
(B) make predictions based on observable patterns in nature; and	✓
(C) explore that scientists investigate different things in the natural world and use tools to help in their investigations.	✓
(4) Scientific investigation and reasoning. The student uses age-appropriate tools and models to investigate the natural world. The student is expected to:	
(A) collect information using tools, including computing devices, hand lenses, primary balances, cups, bowls, magnets, collecting nets, and notebooks; timing devices; non-standard measuring items; weather instruments such as demonstration thermometers; and materials to support observations of habitats of organisms such as terrariums and aquariums; and	✓
(B) use the senses as a tool of observation to identify properties and patterns of organisms, objects, and events in the environment.	✓
(5) Matter and energy. The student knows that objects have properties and patterns. The student is expected to:	
(A) observe and record properties of objects, including bigger or smaller, heavier or lighter, shape, color, and texture; and	✓
(B) observe, record, and discuss how materials can be changed by heating or cooling.	✓
(6) Force, motion, and energy. The student knows that energy, force, and motion are related and are a part of their everyday life. The student is expected to:	
(A) use the senses to explore different forms of energy such as light, thermal, and sound;	✓
(B) explore interactions between magnets and various materials;	✓
(C) observe and describe the location of an object in relation to another such as above, below, behind, in front of, and beside; and	✓
(D) observe and describe the ways that objects can move such as in a straight line, zigzag, up and down, back and forth, round and round, and fast and slow.	✓
(7) Earth and space. The student knows that the natural world includes earth materials. The student is expected to:	
(A) observe, describe, and sort rocks by size, shape, color, and texture;	✓
(B) observe and describe physical properties of natural sources of water, including color and clarity; and	✓
(C) give examples of ways rocks, soil, and water are useful.	✓
(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:	
(A) observe and describe weather changes from day to day and over seasons;	✓
(B) identify events that have repeating patterns, including seasons of the year and day and night; and	✓
(C) observe, describe, and illustrate objects in the sky such as the clouds, Moon, and stars, including the Sun.	✓
(9) Organisms and environments. The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival. The student is expected to:	
(A) differentiate between living and nonliving things based upon whether they have basic needs and produce offspring; and	✓

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TEKS §112.10 - Science, K-5 Elementary	
TEKS Requirement (Elementary)	**TEKS Covered**
(B) examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants.	✓
(10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:	
(A) sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape;	✓
(B) identify basic parts of plants and animals;	✓
(C) identify ways that young plants resemble the parent plant; and	✓
(D) observe changes that are part of a simple life cycle of a plant: seed, seedling, plant, flower, and fruit.	✓
Source: The provisions of this §112.11 adopted to be effective August 4, 2009, 34 TexReg 5063.	