|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Strand 1: Inquiry Process****Concept 1: Observations, Questions, and Hypotheses** | **S1C1PO** **1**. Compare common objects using multiple senses. **M** | I can compare objects using my senses. | Analysis | <http://www.sedl.org/scimath/pasopartners/senses/overview.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 53[www.macmilanmh.com](http://www.macmilanmh.com)<http://www.brighthub.com/education/k-12/articles/9387.aspx> | investigation |
| Strand 1: Inquiry ProcessConcept 1: Observations, Questions, and Hypotheses | **S1C1PO** **2**. Ask questions based on experiences with objects, organisms, and events in the environment. **C** | I can ask questions based on experiences with objects, organisms, and events.  | Comprehension | <http://www.ehow.com/list_6618789_inquiry_based-science-activities.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 12 & 334-335.[www.macmilanmh.com](http://www.macmilanmh.com) | predictions |
| Strand 1: Inquiry ProcessConcept 1: Observations, Questions, and Hypotheses | **S1C1PO** **3.** Predict results of an investigation based on life, physical, and Earth and space sciences (e.g., animal life cycles, physical properties, Earth materials).**C** | I can predict results based on specific investigation processes.  | Evaluation | <http://www.suite101.com/content/problem-solving-and-science-process-skills-a65807>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 12, & p. 8 - 9.[www.macmilanmh.com](http://www.macmilanmh.com) | predictresultsinvestigationprocesses |
| Strand 1: Inquiry Process**Concept 2: Scientific Testing (Investigating and Modeling)**  | **S1C2PO** **1.** Demonstrate safe behavior and appropriate procedures (e.g., use of instruments, materials, organisms) in all science inquiry. **C** | I can demonstrate safety procedures when using various scientific equipment.  | Application | <http://www.ehow.com/list_7435047_safety-procedures-science.html><http://ims.ode.state.oh.us/ODE/IMS/Lessons/Content/CSC_LP_S05_BB_L01_I03_01.pdf>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 16 | proceduresequipment |
| Strand 1: Inquiry ProcessConcept 2: Scientific Testing (Investigating and Modeling) . | **S1C2PO 2** Participate in guided investigations in life, physical, and Earth and space sciences. **C** | I can participate in scientific investigations.  | Comprehension | <http://school.discoveryeducation.com/sciencefaircentral/Getting-Started/Investigation.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, “Be a Scienntist”, p 1 - 15.[www.macmilanmh.com](http://www.macmilanmh.com) | Life, physical, Earth science |
| Strand 1: Inquiry ProcessConcept 2: Scientific Testing (Investigating and Modeling)  | **S1C2PO** **3**. Use simple tools such as ruler, thermomters, magnifiers, and balances to collect data (U.S. customary units). **C**  | I can collect data by using various U. S. customary unit tools.  | Application | <http://www.teachervision.fen.com/laboratory-equipment/printable/29290.html><http://www.studyzone.org/testprep/math4/d/measure4l.cfm> | datacustomary unit measures |
| Strand 1: Inquiry ProcessConcept 2: Scientific Testing (Investigating and Modeling)  | **S1C2PO** **4**. Record data from guided investigations in an organized and appropriate format (e.g., lab book, log, notebook, chart paper). **C**  | I can record data in an organized format.  | Application | <http://www.ehow.com/info_7842775_first-grade-math-graphing-lessons.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 13 – 15 & p. 4 – 7.[www.macmilanmh.com](http://www.macmilanmh.com) | record data |
| Strand 1: Inquiry Process**Concept 3: Analysis and Conclusions**  |  **S1C3PO** **1**. Organize (e.g., compare, classify, and sequence) objects, organisms, and events according to various characteristics. **C**  | I can organize objects and events.  | Application | <http://www.glencoe.com/sec/science/sc_interactions/si1/skill_handbook/oinfo.shtml><http://www.ehow.com/list_6142815_science-matter-activities-first-grade.html> | compare, classify, order, sequence organisms characteristics |
| Strand 1: Inquiry ProcessConcept 3: Analysis and Conclusions . | **S1C3PO** **2**. Compare the results of the investigation to predictions made prior to the investigation. **C** | I can compare resuts to prior predictions.  | Comprehension | <http://www.ehow.com/info_7929813_simple-science-projects-first-grade.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 13 - 15.[www.macmilanmh.com](http://www.macmilanmh.com) | compareresults investigation |
| Strand 1: Inquiry Process**Concept 4: Communication** | **S1C4PO** **1.** Communicate the results of an investigation using pictures, graphs, models, and/or words. **C**  | I can explain my results using pictures, graphs, models, and/or words.  | Synthesis | <http://www.ehow.com/info_7842775_first-grade-math-graphing-lessons.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 13 - 15.[www.macmilanmh.com](http://www.macmilanmh.com) | graphs models  |
| Strand 1: Inquiry ProcessConcept 4: Communication | **S1C4PO** **2**. Communicate with other groups to describe the results of an investigation. (See LS-F1)**C** | I can explain the results of an investigation to a group.  | Synthesis | <http://www.ehow.com/info_7842775_first-grade-math-graphing-lessons.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 13 - 15. [www.macmilanmh.com](http://www.macmilanmh.com) | investigation |
| **Strand 2: History and Nature of Science****Concept 1: History of Science as a Human Endeavor** | **S6C1PO** **1** Give examples of how diverse people (e.g., children, parents, weather reporters, cooks, healthcare workers, gardeners) use science in daily life. **C** | I can give examples of how different professions use science in daily life.  | Application | <http://www.physics.unl.edu/~fulcrum/history/2004/Goodrich/GK12_AY04_RoleModel_Goodrich_Swartzlander_v2.pdf>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 80 and p. 17 - 19. [www.macmilanmh.com](http://www.macmilanmh.com) | science contributionscareers |
| Strand 2: History and Nature of ScienceConcept 1: History of Science as a Human Endeavor | **S6C1PO** **2**. Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., Sally Ride [scientist], supports Stand 6; Neil Armstrong [astronaut, engineer], supports Stand 6). **C** | I can name people who have made important contributions to scientific innovations in past and present life.  | Knowledge | http://www.sciencenetlinks.org/lessons.php?BenchmarkID=10&DocID=236 |  Scientific innovationscontributions |
| **Strand 4: Life Science****Concept 1: Characteristics of Organisms** | **S4C1PO 1**. Identify the following characteristics of living things: * growth and development
* reproduction
* response to stimulus

**C** | I can find out the characteristics of living things in growth and development, reproduction, and its reaction to the environment.  | Knowledge | <http://www.tooter4kids.com/Frogs/life_cycle_of_frogs.htm>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 114.[www.macmilanmh.com](http://www.macmilanmh.com)http://www.teachers.ash.org.au/jmresources/butlifecycle/index.html | stimulus |
| Strand 4: Life ScienceConcept 1: Characteristics of Organisms | **S4C1PO 2**. Compare the following observable features of living things: * movement- legs, wings
* protection – skin, feathers, tree bark
* respiration - lungs, gills
* support – plant stems, tree trunks

**C** | I can compare ways living things move. I can compare ways living things breathe. I can compare ways living things have support.  | Comprehension | <http://www.uen.org/Lessonplan/preview.cgi?LPid=621><http://www.sciencenetlinks.com/lessons.php?DocID=87>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 28 - 35.[www.macmilanmh.com](http://www.macmilanmh.com) | movementprotectionrespirationsupport |
| Strand 4: Life ScienceConcept 1: Characteristics of Organisms | **S4C1PO 3**. Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals. **C** | I can recognize the similiarities and differences in plants. I can recognize the similiarities and differences in animals.  | Comprehension | <http://www.nden.k12.wi.us/k8/firfor.htm><http://www.sasked.gov.sk.ca/docs/elemsci/gr1uaesc.html><http://www.learninghaven.com/science/articles/classification_chart.htm>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 104 – 106 & 110.[www.macmilanmh.com](http://www.macmilanmh.com) | IdentifyComparecontrast |
| Strand 4: Life Science**Concept 2: Life Cycles** | **S4C2PO** **1**. Identify stages of human life (e.g., infancy, adolescence, adulthood). **M** | I can identify the life cycles of plants and animals.  | Knowledge | <http://www.valdosta.edu/~vlstout/topic.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 108 - 115.[www.macmilanmh.com](http://www.macmilanmh.com) | life cyclesInfancyadolescenceadulthood |
| Strand 4: Life ScienceConcept 2: Life Cycles  | **S4C2PO** **2**. Identify similarities and differences between animals and their parents. (See 1CH-F4)**M** | I can recognize the similarities and differences between animals and their parents.  | Knowledge | <http://www.teachervision.fen.com/animal-biology/printable/32536.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 108 - 115.[www.macmilanmh.com](http://www.macmilanmh.com) | similiaritiesdifferences |
| Strand 4: Life Science**Concept 3: Organisms and Environments** | **S4C3PO** **1** Identify some plants and animals that exist in the local environment.**I M** | I can name plants and animals that live locally. | Knowledge | <http://www.canyonart.com/rugs-n-e.htm><http://www.enchantedlearning.com/biomes/>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 65, 68 – 70, [www.macmilanmh.com](http://www.macmilanmh.com) | biomeregion |
| Strand 4: Life ScienceConcept 3:Organisms and Environments | **S4C3PO** **2**. Compare habitats (e.g., desert, forest, prairie, water, underground) in which plants and animals live.**I M**  | I can compare plants and animals of desert, forest, prairie, water, and underground habitats.  | Comprehension | <http://www.canyonart.com/rugs-n-e.htm><http://www.enchantedlearning.com/biomes/>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 65, 68 – 70, [www.macmilanmh.com](http://www.macmilanmh.com) | habitatscompare |
| Strand 4: Life ScienceConcept 3: Organisms and Environments | **S4C3PO** **3**. Describe how plants and animals within a habitat are dependent on each other**I M** | I can describe how plants and animals depend on each other within a habitat.  | Knowledge | <http://www.teachervision.fen.com/food-web/printable/39797.html><http://www.brighthub.com/education/k-12/articles/9986.aspx>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 17 -19 and 144.- 145 [www.macmilanmh.com](http://www.macmilanmh.com) | depend |
| **Strand 5: Physical Science****Concept 1: Properties of Objects and Materials** | **S5C1PO 2**. Classify materials as solids or liquids. **M** | I can classify objects as solids or liquids.  | Comprehension | [http://cmapspublic2.ihmc.us/rid=1115229240684\_1697656606\_421/Sorting%20and%20Classifying%20Lesson%20Plan.doc](http://cmapspublic2.ihmc.us/rid%3D1115229240684_1697656606_421/Sorting%20and%20Classifying%20Lesson%20Plan.doc)SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 35.[www.macmilanmh.com](http://www.macmilanmh.com) | solidsliquidsobservable |
| Strand 5: Physical Science**Cocept 2: Position and Motion of Objects**  | **S5C2PO** **1**. Demonstrate the various ways that objects can move (e.g., straight line, zigzag, back-and-forth, round-and-round, fast, slow). **M** | I can demonstrate ways objects move.  | Comprehension | http://www.rockingham.k12.va.us/resources/elementary/1science.htm |  |
| **Strand 6: Earth and Space Science****Concept 1: Properties of Earth Materials** | **S6C1PO 1.** Describe the following basic Earth materials. * rocks
* soil
* water

**M** | I can describe a basic Earth element. (rock, soil, water) | Comprehension | http://www.associatedcontent.com/article/2718165/first\_grade\_science\_activity\_rock\_and.html?cat=4 |  |
| Strand 6: Earth and Space ScienceConcept 1: Properties of Earth Materials | **S6C1PO 2**. Compare the following physical properties of basic Earth materials: * color
* texture
* capacity to retain water

**M** | I can compare Earth materials by their physical characteristics.  | Comprehension | http://www.mcpasd.k12.wi.us/sunsetweb/classes/Sheffield/firstgrade/special%20events/rocks.html | physical propertiescharacteristicsretain |
| Strand 6: Earth and Space ScienceConcept 1: Properties of Earth Materials | **S6C1PO 3**. Identify common uses (e.g., costruction, decoration) of basic Earth materials (i.e., rocks, water, soil). **M** | I can recognize common uses of rocks, water and soil in daily living.  | Knowledge | <http://crafts.kaboose.com/nature-crafts.html>http://www.kshs.org/teachers/trunks/pdfs/indian\_homes\_02\_lesson\_natural\_resources.pdf |  |
| Strand 6: Earth and Space ScienceConcept 1: Properties of Earth Materials | **S6C1PO 4**. Identify the following as being natural resources: * air
* water
* soil
* trees
* wildlife

**M** | I can identify air, water, soil, trees, and wildlife as natural resources.  | Knowledge | http://www.lkwdpl.org/schools/elempath/RRR/ | natural resources |
| Strand 6: Earth and Space ScienceConcept: 1: Properties of Earth Materials . | **S6C1PO** **5**. Identify ways to conserve natural resources (e.g., reduce, reuse, recycle, find alternatives). **I** | I can identify ways to reuse/recycle resources. | Synthesis | <https://c1.livetext.com/doc/5257681>http://www.lkwdpl.org/schools/elempath/RRR/ | conservereuserecycle |
| Strand 6: Earth and Space Science**Concept 2: Objects in the Sky** | **S6C2PO** **1**. Identify evidence that the Sun is the natural source of heat and light on the Earth (e.g., warm surfaces, shadows, shade). **I M** | I can recognize that the Sun is the main source of light on Earth. | Comprehension | <http://www.aerospaceguide.net/solar_system/sun.html><http://littlejackscorner.mrscoles.com/wp-content/uploads/2008/03/sun-moon-earth-complete-science-unit-1st-grade.pdf>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 266 -269 & p.. 270. | natural sourceevidence |
| Strand 6: Earth and Space ScienceConcept 2: Objects in the Sky | **S6C2PO** **2**. Compare celestial objects (e.g., Sun, Moon, stars) and transient objects in the sky (e.g., clouds, birds, airplanes, contrails). **I M** | I can compare celestial to short-lived objects in the sky.  | Comprehension | <http://littlejackscorner.mrscoles.com/wp-content/uploads/2008/03/sun-moon-earth-complete-science-unit-1st-grade.pdf><http://science-edu.larc.nasa.gov/GLOBE/science.html>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 278. | comparecontrailscelestial short-lived |
| Strand 6: Earth and Space ScienceConcept 2: Objects in the Sky | **S6C2PO** **3**. Describe observable changes that occur in the sky, (e.g., clouds forming and moving, the position of the Moon). **I M** | I can explain observable changes of objects in the sky.  | Comprehension | <http://www.sciencenetlinks.com/lessons.php?BenchmarkID=4&DocID=155>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 278. | ObservePositionphases |
| Strand 6: Earth and Space Science**Concept 3: Changes in the Earth and Sky**  | **S6C3PO** **1**. Identify the following characteristics of seasonal weather patterns: * Temperature
* Type of precipitation
* Wind

**M** | I can identify the characteristic of seasonal weather patterns. (temperature, type of precipitation, wind).  | Comprehension | <http://www.msnucleus.org/membership/html/k-6/wc/pdf/wc1we.pdf><http://www.rockingham.k12.va.us/resources/elementary/1science.htm>SCIENCE A CLOSER LOOK, Macmillan/McGraw-Hill Grade 1, p. 278, 236, 240, 249, 255. |  |
| Strand 6: Earth and Space ScienceConcept 3: Changes in the Earth and Sky  | **S6C3PO** **2.** Analyze how the weather affects daily activities. **M** | I can explore how the weather affects daily life.  | Analysis | http://www.rockingham.k12.va.us/resources/elementary/1science.htm |  |