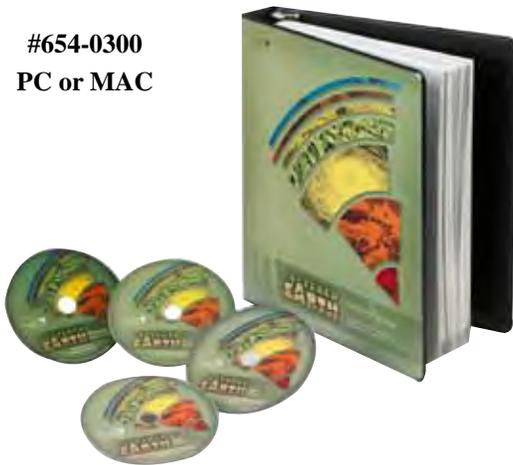


Excellent science resources to cover both "Fair Game" and heavily tested FCAT 2.0 Science NGSS
5th Grade-Earth and Space Science

THE LAYERED EARTH GEOLOGY SIMULATION SOFTWARE

#654-0300
PC or MAC



(2) SC.4.E.6.2 Identify the physical properties of common earth-forming minerals, including hardness, color, luster, cleavage, and streak color, and recognize the role of minerals in the formation of rocks.

(2) SC.4.E.6.4 Describe the basic differences between physical weathering (breaking down of rock by wind, water, ice, temperature change, and plants) and erosion (movement of rock by gravity, wind, water, and ice).

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.SL.5.2

Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

TOPICS COVERED IN THE SOFTWARE:



The Solid Earth

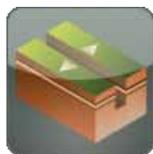
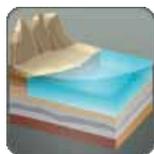


Plate Tectonics



Minerals and Rocks



Shaping the Earth



Earthquakes



Volcanoes



Geologic Time

25+ Lesson Plans correlated to state and national standards that meet curriculum needs.

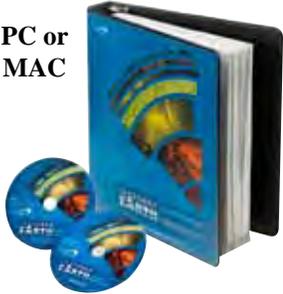
- Accurate and Innovative Simulations that engage students, illustrate and enhance basic concepts.
- In-depth Discovery Exercises that foster data collection and analytical thinking skills.
- Learner Strategies including anticipation guides, multiple intelligences, and graphic organizers.
- Pre and Post-Assessment Activities to test student knowledge and reinforce basic concepts.
- Links and Extensions provide connections to mathematics, literacy, history, travel, and STSE (Science, Technology, Society, and the Environment).

Excellent science resources to cover both "Fair Game" and heavily tested FCAT 2.0 Science NGSSS

5th Grade-Earth and Space Science

THE LAYERED EARTH METEOROLOGY SIMULATION SOFTWARE

PC or
MAC



#654-0305

(2) SC.5.E.7.1 Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another.

(3) SC.5.E.7.3 Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led)

with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.SL.5.2

Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

20+ Lesson Plans correlated to state and national standards that meet curriculum needs.

- Clear articulation of Learner Expectations for each lesson through the use of an introductory Guiding Questions, bulleted Key Concepts, and a Lesson Summary highlighting the main points of each unit
- An attractive learning environment with clear and easy to follow Progression of Concepts
- Accurate and innovative Visualizations, and Simulations that engage students and illustrate and enhance basic concepts
- In-depth Discovery Exercises that foster observation, measurement, mathematical, and analytical thinking skills
- Pre- and Post-Assessment Activities to test student knowledge and learning, and reinforce basic concepts
- Incorporates Learner Strategies from current educational research such as anticipation guides, multiple intelligences, and graphic organizers
- Numerous Links and Extensions for a rich learning environment that provide connections to mathematics, literacy, history, travel, and STSE (Science, Technology, Society, and the Environment)

TOPICS COVERED IN THE SOFTWARE:



The Atmosphere



Earth's Energy Balance



Atmospheric Circulation



Weather

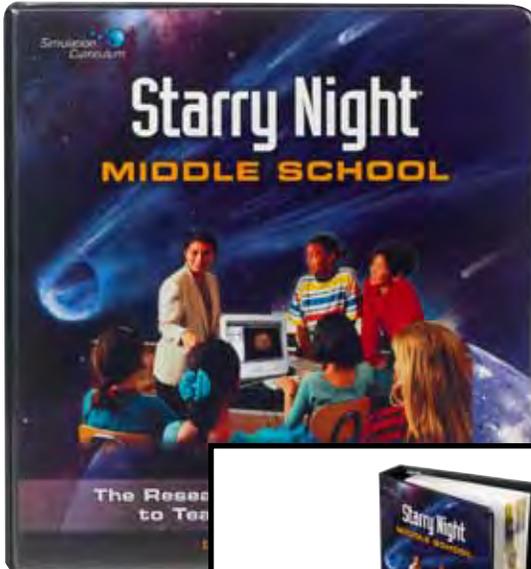


Climate



Climate Change

STARRY NIGHT SIMULATION CURRICULUM SOFTWARE



#654-0294
PC or MAC



(3) SC.4.E.5.4 Relate that the rotation of the Earth and apparent movements of the Sun, Moon, and stars are connected.

(1) SC.5.E.5.1 Recognize that a galaxy consists of gas, dust, and many stars, including any objects orbiting the stars.

(2) SC.5.E.5.3 Distinguish between inner and outer Planets; Distinguish between asteroids and comets

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.SL.5.2

Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

28 Lesson Plans correlated to state and national standards and extensive teacher resources.

- Accurate visualizations and simulations that allow students to make precise observations of Moon phases, motions of the Sun and planets and much more
- Interactive computer exercises and hands-on activities that encourage questioning, experimentation and exploration and accommodate diverse learning styles
- Pre- and post-assessment resources with recommendations for improved student performance
- Flexible teaching models for easy adaptation to pacing and classroom needs
- Opportunities to develop key skills: observation, data collection, analytical thinking and discovery
- Extensions that connect to topics in math, physics, language arts, social studies and technology

NEW FEATURES highlight the latest theories and address classroom needs:

- 4 lesson plans, focused on the reclassification of Pluto, unmanned space exploration, astronomy and black holes
- Math and observing extensions for most lessons
- Revised and expanded assessment resources
 - Pre-assessment Idea Diagrams and Concept Maps identify pre-conceptions
 - Thinking Grids and Contrast and Compare charts develop logical and critical thinking skills
 - Drawing Completion activities and KWL charts assess student understanding
 - Easy-to-use Scoring Rubric evaluate learning of science content and process
- Expanded library of astronomy simulations
- Lesson Plans at a Glance help you choose the lesson plans that best fit your curriculum requirement
- QuickStart Guide for teachers new to astronomy or using Starry Night for the first time

Excellent science resources to cover both "Fair Game" and heavily tested FCAT 2.0 Science NGSSS

5th Grade-Earth and Space Science

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

Mineral Test Kits - Identify Physical Properties

(2) SC.4.E.6.2 Identify the physical properties of common earth-forming minerals, including hardness, color, luster, cleavage, and streak color, and recognize the role of minerals in the formation of rocks.



#651-4010

#651-4010 Cleavage Collection

#651-4112 Luster Collection

#651-7130 Individual Mineral Test Kit



#651-7130

#651-4211 Hardness Collection w/ diamond
(w/o diamond)

#651-7125 Mineral Structure Kit



#651-7125

Original Trippensee Planetarium

110 Volt



#653-3010

(3) SC.4.E.5.4 Relate that the rotation of the Earth and apparent movements of the Sun, Moon, and stars are connected.

Create the motions of the earth, sun, and moon simultaneously using the Trippensee® planetarium. Move the arm to dramatically demonstrate these relationships. The light in the sun follows the revolving earth to show solar, lunar, and annular eclipses; phases of the moon; seasonal changes; night and day; and twilight.

Excellent science resources to cover both "Fair Game" and heavily tested FCAT benchmarks

5th Grade-Physical Science

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

(3) SC.5.P.10.4-Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion.

SC.4.P.11.1 Recognize that heat flows from a hot object to a cold object and that heat flow may cause materials to change temperature.

SC.4.P.11.2 Identify common materials that conduct heat well or poorly.



Investigating Energy Transfer Kit

(1)SC.5.P.8.3 Demonstrate and explain that mixtures of solids can be separated based on observable properties of their parts such as particle size, shape, color, and magnetic attraction.

Explore the physics of heat transfer by filling one container with warm and the other with boiling water. Use a thermometer to determine heat lost and gained. Includes three containers, copper transfer bar, detailed instructions with worksheets and teacher pages.

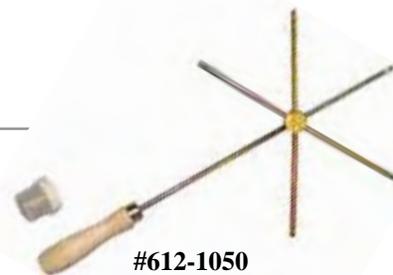
#612-1055



Sifter and Bead Set

Don't have access to soils, or don't want the mess? Simulate soil separations with this kit. When you drop the included beads into the sifter column, the various size will separate out according to whichever sieve catches them.

#621-7140



#612-1050

Conductometer with Wax

This device demonstrates the diverse thermal conductivity of five distinct metals. Place small amounts of the included wax over each metal spoke. Heat the central hub over a Bunsen burner flame and watch the differing rates at which the wax melts. Includes: brass hub; five labeled metal spokes (aluminum, brass, steel, nickel and copper); wax; wood handle, and instructions.

Excellent science resources to cover both "Fair Game" and heavily tested FCAT benchmarks

5th Grade-Life Science

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

Flower Model Activity Kit

(3) SC.3.L.14.1 Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.

Learn all about seed development with this three dimensional model depicting monocot and dicot plant germination.

Teacher's guide

includes overhead transparency, student activities, key and glossary.

#636-7420

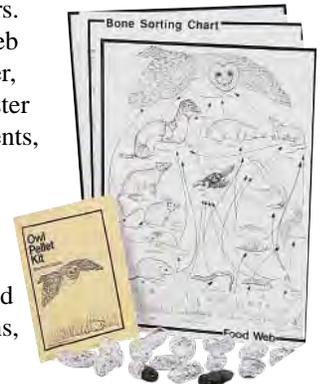


Classroom Owl Pellet Kit

(2) SC.4.L.17.3 Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.

This kit features a food web poster, vole skeleton poster, and bone sorting chart poster showing the bones of rodents, shrews, moles and birds.

They are heat sterilized, individually wrapped barn owl pellets. Teacher's Guide contains background information, teaching plans, lab guide, projects, skull keys and references.



15 Pellet Kit #635-4910



#636-7410

Germination Activity Set

Our 61 x 45cm model features an enlarged view of a typical flower, dissected to show the stem, sepal, petal, stamen and pistil. Trace the path of the male gamete to the female within the ovary. Includes teacher's guide and color transparencies.



#635-1550 - Silkworm



#635-1555 - Honeybee

Life Cycle Mounts

(1) SC.4.L.16.4 Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.



#635-1560 - Grasshopper

#635-1560

Grasshopper

#635-1555

Honeybee

#635-1550

Silkworm

5th Grade Common Core Correlations

Depending on the activities, experiments and performance assessments chosen for the students, the following common core standards may be applicable.

WRITING

Text Types and Purposes:

CCSS.ELA-LITERACY.W.5.1

Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.ELA-LITERACY.W.5.1.A

Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

CCSS.ELA-LITERACY.W.5.1.B

Provide logically ordered reasons that are supported by facts and details.

CCSS.ELA-LITERACY.W.5.2

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA-LITERACY.W.5.2.A

Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

CCSS.ELA-LITERACY.W.5.2.B

Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

CCSS.ELA-LITERACY.W.5.2.D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

CCSS.ELA-LITERACY.W.5.2.E

Provide a concluding statement or section related to the information or explanation presented.

Production and Distribution of Writing:

CCSS.ELA-LITERACY.W.5.4

Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

Research to Build and Present Knowledge:

CCSS.ELA-LITERACY.W.5.7

Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

Range of Writing:

CCSS.ELA-LITERACY.W.5.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

SPEAKING AND LISTENING

Comprehension and Collaboration:

CCSS.ELA-LITERACY.SL.5.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.A

Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

CCSS.ELA-LITERACY.SL.5.1.D

Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS.ELA-LITERACY.SL.5.2

Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Presentation of Knowledge and Ideas:

CCSS.ELA-LITERACY.SL.5.4

Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.5.5

Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

READING INFORMATIONAL TEXT

Craft and Structure:

CCSS.ELA-LITERACY.RI.5.4

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.