

Department: Science

Course Name: Third Grade Science

Course Description:

Our year begins with a study of Physical Science. Students will begin by learning about the properties and states of matter, forces, motion and simple machines. Students will also learn about the different forms of energy including: mechanical, heat, light and chemical. Students will study sound and finish by exploring electricity. Physical Science will be followed by Earth Science. Students will learn about types of rocks and properties of minerals. Students will also explore the earth's surface and how it is constantly changing. The year will conclude with a study of Life Science. The year will conclude with a study of the human body and how the systems work together to keep us alive. Throughout the third grade year students are taught proper note-taking skills, study skills and organizational strategies. In addition, students practice answering content questions in complete sentences and paragraphs to relay knowledge of a topic.

Content:

Matter
Forces and motion
Simple machines
Forms of energy
Sound
Electricity
Rocks and minerals
Erosion and deposition
Human Body major systems

Skills:

Practice note-taking skills and organization
Develop study skills and strategies
Work collaboratively to test a hypothesis
Analyze data and draw conclusions based on evidence
Formulate meaningful questions that can be tested
Connect information learned in one classroom to experiments conducted in a lab
Identify properties of matter
Identify three states of matter
Understand physical and chemical changes of matter
Distinguish between a mixture and a solution
Identify forces as pushes and pulls
Understand gravity is a force that is pulling us
Explain how a force can change an object's motion
Understand how friction affects the speed of an object
Understand that magnetism is a force and how to use it
Identify types of simple machines
Recognize how simple machines make work easier
Distinguish between mechanical, heat, light and chemical energy
Understand vibration produces sound
Distinguish between pitch and volume of sound
Explain how electricity moves through a circuit
Identify different types of electricity
Identify three types of rocks

Identify the properties of minerals
Explore the circulatory, respiratory, digestive, musculoskeletal and nervous systems
Identify each system's job and how it works to help the human body
Identify major organs in each system of the human body studied

Texts and Materials:

Bell, Randy, Malcolm B. Butler, Kathy Cabe Trundle, Judith S. Lederman, and David W. Moore, Life Science (National Geographic, 2011)
Bell, Randy, Malcolm B. Butler, Kathy Cabe Trundle, Judith S. Lederman, and David W. Moore, Physical Science (National Geographic, 2011)
Bell, Randy, Malcolm B. Butler, Kathy Cabe Trundle, Judith S. Lederman, and David W. Moore, Earth Science (National Geographic, 2011)
Bell, Randy, Malcolm B. Butler, Kathy Cabe Trundle, Judith S. Lederman, and David W. Moore, Science Inquiry and Writing Book (National Geographic, 2011)
Carratello, Patricia, My Body (Teacher Created Materials, 2011)
Joanna Cole, Magic School Bus: Inside the Earth (Scholastic)
Joanna Cole, Magic School Bus: Inside the Human Body (Scholastic)
Matter- Digital edition, (Kids Discover)
Simple Machines, digital edition, (Kids Discover)
Geology, digital edition, (Kids Discover)

Methods of Instruction:

Direct whole class instruction
Comprehension sheets
iPad
Group discussion
Video presentation
Small group instruction
Independent reading
Small group reading
Fieldtrips
Hands-on laboratory experiments
Small group digital creations

Methods of Evaluation:

Group projects
Oral Presentations
Chapter Quizzes
Unit Tests
On-demand writing
Written comprehension questions
Independent Projects
Lab reports
Hands on lab experiments
Digital books