

Sixth Grade Science

Science Course Description

Philosophy Statement: The natural world was created by the word of God and reveals facets of the character and nature of God. Science is taught through problem solving, hands-on experiments, observation and conclusions. Science education should provide students with an understanding of the created world, creating a sense of awe and wonder concerning the creative God. Foundations of science understanding can be used for further study and academic preparation to equip students to compassionately care for people and wisely steward creation.

Course Objective: Students will learn to analyze God's creation by exploring the earth's oceans, movements, and resources.

Resources/Textbook:

- Core Knowledge Teacher Handbook, Grade 6
- Holy Bible (NIV)
- Prentice Hall Science Explorer Books
- AIMS
- Lawrence Hall of Science

Materials:

- Student Workbooks

Time Allotment: 50 minutes per day, 5 days per week, 2 semesters

Course Content:

- The Water Planet
- Motions of the Oceans
- Ocean Life
- A Chance at Stardom
- Plate Tectonics
- Earthquakes
- Volcanoes
- Energy Resources
- Fighting Back: Our Immune System
- Heat: The Nomad

Areas to be evaluated:

Class participation, homework assignments and tests and quizzes.

Additional Activities:

Various hands-on activities throughout the units.

Seventh Grade Science

Science Course Description

Philosophy Statement: The natural world was created by the word of God and reveals facets of the character and nature of God. Science is taught through problem solving, hands-on experiments, observation and conclusions. Science education should provide students with an understanding of the created world, creating a sense of awe and wonder concerning the creative God. Foundations of science understanding can be used for further study and academic preparation to equip students to compassionately care for people and wisely steward creation.

Course Objective: Students will explore the character of God through the study of his handiwork in the details of the physical world.

Resources/Textbook:

- Core Knowledge Teacher Handbook, Grade 7
- Holy Bible (NIV)
- Prentice Hall, Science Explorer (Chemical Interactions, Earth's Changing Surface, Cells and Heredity)

Materials:

- Student Workbooks
- Various Teacher Workbooks
- National Institutes of Health Curriculum Supplements
- Delta Science Modules (Chemical Interactions, DNA from Genes to Proteins)

Time Allotment: 50 minutes per day, 5 days per week, 2 semesters

Course Content:

- The Nature of Science
- Matter & Mixtures
- Atoms, Elements & Chemical Bonds
- Chemical Reactions
- Organic Chemistry
- Solving Mysteries with Science
- Cell Division & Genetics
- Earth History, Creation & Evolution

Areas to be evaluated:

Class participation, homework assignments and tests and quizzes.

Additional Activities:

Various hands-on activities throughout the units.

Eighth Grade Science

Science Course Description

Philosophy Statement: The natural world was created by the word of God and reveals facets of the character and nature of God. Science is taught through problem solving, hands-on experiments, observation and conclusions. Science education should provide students with an understanding of the created world, creating a sense of awe and wonder concerning the creative God. Foundations of science understanding can be used for further study and academic preparation to equip students to compassionately care for people and wisely steward creation.

Course Objective: Students will explore God's creation by analyzing the purposeful design and interrelatedness of the physical world.

Resources/Textbook:

- Core Knowledge Teacher Handbook, Grade 8
- Holy Bible (NIV)
- Prentice Hall, Science Explorer (Human Biology, Sound and Light, Electricity and Magnetism. Motion and Forces)

Materials:

- Student Workbooks
- Various Teacher Workbooks
- National Institutes of Health Curriculum Supplements
- Delta Science Modules (Newton's Toolbox, Electrical Connections)

Time Allotment: 50 minutes per day, 5 days per week, 2 semesters

Course Content:

- The Nature of Science
- Science of Energy Balance: Nutrition, Digestion, and Physical Activity
- Musculoskeletal System
- Cellular Energy Cycles
- Sound Waves
- Electromagnetic Radiation and Light
- Work and Machines
- Laws of Motion
- Electricity

Areas to be evaluated:

Class participation, homework assignments and tests and quizzes.

Additional Activities:

Various hands-on activities throughout the units.