Grades 5–8 Detailed Table of Contents

Unit THREE: EARTH AND SPACE SCIENCE

Grade 5

Unit ONE: LIFE SCIENCE
Chapter 1: Living Things
Big Idea All living things were created by God. They are made of cells, reproduce, and share many other characteristics.
Lesson 1 What Are Living Things?
Essential Learnings: 5.3A.1, 5-8.C.1.b, 5-8.C.2.a, 5-8.C.3.a
Lesson 2 How Are Living Systems Organized?
Essential Learnings: 5.3C.1, 5-8.C.1.a, 5-8.C.1.d
Lesson 3 How Do Cells Divide and Reproduce?
Essential Learning: 5.3C.2
Chapter 2: Classification of Organisms
Big Idea God must really love variety to have created so many different animals with such fascinating characteristics! Scientists use different characteristics to classify animals into groups that make them easier to study.
Lesson 1 How Do We Classify Organisms?
Essential Learnings: 5.3A.2, 5-8.C.5.a
Lesson 2 What Are the Domains of Life?
Essential Learnings: 5.3A.2, 5-8.A.2.f, 5-8.A.2.g
Lesson 3 What Are Fish, Amphibians, and Reptiles?
Essential Learning: 5.3A.3
Lesson 4 What Are Birds and Mammals?
Essential Learning: 5.3A.3
Chapter 3: Adaptation
Big Idea God created living organisms with certain physical and behavioral characteristics that help them survive. He also created them with the potential for a limited amount of change so they could adapt to changing environments.
Lesson 1 What Is Adaptation?
Essential Learnings: 5.3F.1, 5.3F.2
Lesson 2 What Are Physical Adaptations?
Essential Learnings: 5.3F.1, 5.3F.2, 5-8.C.5b
Lesson 3 What Are Behavioral Adaptations?
Essential Learnings: 5.3E.1, 5.3E.2, 5.3F.1, 5-8.C.3.c
Lesson 4 What Are Some Plant Adaptations?
Essential Learning: 5.3F.2
Chapter 4: Organisms Interact
Big Idea God created organisms in an ecosystem to interact positively with each other and the environment. As a result of sin, some interactions have changed.
Lesson 1 What Is an Ecosystem?
Essential Learnings: 5.3B.2, 5-8.C.4.B
Lesson 2 How Does Energy Flow in an Ecosystem?
Essential Learnings: 5.3B.1, 5-8.C.4.C, 5.3B.1, 5-8.C.4.B
Lesson 3 How Do Organisms Interact?
Essential Learning: 5-8.C.4.D
Unit TWO: THE HUMAN BODY
Chapter 5: Puberty and the Reproductive System
Big Idea God created both males and females in His image. Together they can represent Him more fully than either can alone. As boys and girls grow into men and women, they are able to share a little of God's creativity by being able to reproduce children that are created in His image, just as they were created.
Lesson 1 What Is God's Plan for Sexuality?
Lesson 2 How Do Boys and Girls Grow and Change?

sson 3 What Is God's Design for Reproduction?

Big Idea God designed an amazing reproductive system that allows a man and woman to experience a little of His creative power.

Lesson 1 How Does a Baby Develop throughout Pregnancy?

Big Idea An unfortunate part of life in a sinful world is disease. Many diseases

erious health problems and sometimes death. Some diseases can be avoided

y making choices in harmony with the health principles given to us by God

e caused by pathogens and can be spread from person to person, cau

Lesson 1 How Do We Fight Viruses and Microorganisms?

Chapter 6: Conception, Pregnancy, and Birth

Chapter 7: Common Diseases and Disorders

Lesson 3 Why Do We Care about Health?

Lesson 2 How Is a Baby Born?

Lesson 2 What Are Diseases?

Chapter 8: Weather and Climate
Big Idea Just as God created Earth, God also created the atmosphere
urrounding Earth. People study Earth's atmosphere to understand
veather patterns and climate.
esson 1 What Is the Atmosphere?
ssential Learnings: 5.48.4, 5.48.11
Lesson 2 What Is the Water Cycle?
Essential Learnings: 5.4B.6, 5-8.D.1.g, 5-8.D.1.j
Lesson 3 What Is Weather?
Essential Learnings: 5.4B.1, 5.4B.2
esson 4 What Is Climate?
ssential Learnings: 5.4B.3, 5.4B.5
Chapter 9: Earth's Ocean
Big Idea God created a vast ocean that covers much of Earth's surface. The water
n the ocean provides habitats and nutrients for many different organisms.
esson 1 What Is the Ocean Floor Like?
esson 2 How Does Ocean Water Move?
Essential Learning: 5.4B.8
Lesson 3 What Are Ocean Ecosystems?
Essential Learnings: 5.4B.7, 5.4B.10
Chapter 10: People and Earth
Big Idea God created a variety of ocean and land resources that provide
mportant natural resources. By making positive choices, humans can work
o preserve and restore Earth's ecosystems.
esson 1 Why Is the Ocean Important?
Essential Learning: 5.48.9
esson 2 What Causes the Ocean to Change?
Essential Learning: 5.48.10
esson 3 How Have People Changed Earth's Land and Water?
Essential Learning: 5.4B.10
esson 4 What Happens When Ecosystems Are Changed?
Essential Learning: 5.48.10
-
Unit FOUR:
PHYSICAL SCIENCE
Chapter 11: Forms of Energy
Ne Idea California and an and the State of California California
Big Idea God designed energy to exist in many forms. Energy can change from
Sig Idea God designed energy to exist in many forms. Energy can change from one form to another according to the laws He established.
ne form to another according to the laws He established.
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5
ne form to another according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact?
ne form to another according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5
ne form to another according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact?
ne form to another according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5
né form to anothér according to the laws He éstablished. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God.
ne form to another according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that for can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves?
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Sig Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum?
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Sig Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum?
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 esson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that too can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 esson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that iou can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Spectrum? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 esson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6
né form to anothér according to the laws He éstablished. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 esson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 esson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Essential Learning: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Spectrum? Essential Learnings: 5.2C.4, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learning: 5.2C.5, 5.2C.4 Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws.
né form to anothér according to the laws He éstablished. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 esson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 esson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 esson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that toru can see and some that are invisible. These waves reflect and bend according o laws established by God. esson 1 What Are Electromagnetic Spectrum? Essential Learnings: 5.2C.5, 5.2C.4 esson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 esson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the intoins and behaviors of moving objects. These forces are subject to His laws, hese laws help us explain how forces act on objects and how to predict what
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Essential Learning: 5.2C.5 Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that cou can see and some that are invisible. These waves reflect and bend according o laws established by God. Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.6 Essential Learning: 5.2C.6 Essential Learning: 5.2C.6 Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. These laws help us explain how forces act on objects and how to predict what tappens to objects when various forces are applied to them. essent 1 What Are Forces?
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Spectrum? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea Mene God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. these laws help us explain how forces act on objects and how to predict what tapapens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learning: 5.28.4, 5.28.5, 5.28.6 Essential Learning: 5.28.4, 5.28.5, 5.28.6
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Essential Learning: 5.2C.5 Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Essential Learnings: 5.2C.4, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.6 Essential Learnings: 5.2C.6 Essential Learning: 5.2C.7 Essential Learning: 5.2C.6 Essential Learning: 5.2C.6 Essential Learning: 5.2C.7 Essential Learning: 5.2C.6 Essential Learning: 5.2C.7 Essen
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Spectrum? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea Mene God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. these laws help us explain how forces act on objects and how to predict what tapapens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learning: 5.28.4, 5.28.5, 5.28.6 Essential Learning: 5.28.4, 5.28.5, 5.28.6
në form to anothër according to the laws He established. esson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Essential Learning: 5.2C.5 Essential Learnings: 5.2C.1, 5.2C.5 Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Essential Learnings: 5.2C.4, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.5, 5.2C.4 Essential Learnings: 5.2C.6 Essential Learnings: 5.2C.6 Essential Learning: 5.2C.7 Essential Learning: 5.2C.6 Essential Learning: 5.2C.6 Essential Learning: 5.2C.7 Essential Learning: 5.2C.6 Essential Learning: 5.2C.7 Essen
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according to laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 Lesson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. hese laws help us explain how forces are on objects and how to predict what tappens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learnings: 5.28.4, 5.28.5, 5.28.6 Lesson 2 How Is Motion Described? Essential Learnings: 5.28.3, 5.28.7, 5-8.8.2.a Lesson 3 How Do Forces Affect Motion?
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that ou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. these laws help us explain how forces act on objects and how to predict what tappens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learnings: 5.2B.4, 5.2B.5, 5.2B.6 Lesson 2 How Is Motion Described? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.8.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5-8.B.2, 5-8.B.2.c
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that tou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 Lesson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. these laws help us explain how forces act on objects and how to predict what happens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learnings: 5.2B.4, 5.2B.5, 5.2B.6 Lesson 2 How Is Motion Described? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5-8.B.2, 5-8.B.2.c Chapter 14: Machines Are Helpful
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that too: can see and some that are invisible. These waves reflect and bend according to ans we and some that are invisible. These waves reflect and bend according to as setablished by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. hese laws help us explain how forces act on objects and how to predict what tappens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learnings: 5.2B.4, 5.2B.5, 5.2B.6 Lesson 2 How Is Motion Described? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5-8.B.2.b, 5-8.B.2.c Chapter 14: Machines Are Helpful Big Idea Work is accomplished when a force causes a movement in the direction
në form to anothër according to the laws He established. Lesson 1 What Are Potential and Kinetic Energy? Essential Learning: 5.2C.5 Lesson 2 How Do Thermal Energy and Matter Interact? Essential Learnings: 5.2C.1, 5.2C.5 Lesson 3 What Are Sound Waves? Essential Learnings: 5.2C.2, 5.2C.5 Chapter 12: The Electromagnetic Spectrum Big Idea God created many different kinds of electromagnetic waves, some that tou can see and some that are invisible. These waves reflect and bend according o laws established by God. Lesson 1 What Are Electromagnetic Waves? Essential Learnings: 5.2C.5, 5.2C.4 Lesson 2 What Is the Electromagnetic Spectrum? Essential Learning: 5.2C.3 Lesson 3 How Do Lenses and Mirrors Affect Light? Essential Learning: 5.2C.6 Chapter 13: Forces Affect Motion Big Idea When God created His Universe, forces were created that govern the notions and behaviors of moving objects. These forces are subject to His laws. these laws help us explain how forces act on objects and how to predict what happens to objects when various forces are applied to them. Lesson 1 What Are Forces? Essential Learnings: 5.2B.4, 5.2B.5, 5.2B.6 Lesson 2 How Is Motion Described? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5.2B.3, 5.2B.7, 5-8.B.2.a Lesson 3 How Do Forces Affect Motion? Essential Learnings: 5-8.B.2, 5-8.B.2.c Chapter 14: Machines Are Helpful

Grade 6

Unit ONE: LIFE SCIENCE
hapter 1: An Overview of Life
Fig Idea There is amazing diversity among the living things that God created. he more we study them, the more we see that they also have many things in ommon.
esson 1 What Themes Repeat in Biology?
esson 2 What Makes Nature Complex?
esson 3 What Cycles Exist in Nature?
hapter 2: How Cells Are Alike and Different
big Idea Cells are amazing structures and provide strong evidence of the reator's design. They operate efficiently while carrying out the activities ecessary for life.
esson 1 What Are Cells?
ssential Learnings: 6.3C.2, 7.3C.4
esson 2 How Are Cells Classified?
ssential Learnings: 6.3C.1, 7.3C.1, 7.3C.2, 7.3C.5
esson 3 What Do Organelles Do?
ssential Learnings: 7.3C.2, 7.3C.4
esson 4 How Do Cells Get Energy?
ssential Learning: 7.3C.3
Chapter 3: How Cells Function
Big Idea Cells contain DNA, special structures with instructions for carrying ut life functions. God designed our cells this way so that our bodies can do mazing things.
esson 1 What Is the Structure of DNA?
ssential Learning: 6.3D.1
esson 2 How Are Proteins Made?
ssential Learning: 6.3E.1
esson 3 How Do Cells Help Your Body Function?
ssential Learning: 6.3E.1
Unit TWO: THE HUMAN BODY

Chapter 4: How Your Body Is Organized Big Idea God created your amazing body. It is incredibly complex. Your body is made up of a number of interconnected systems that work in harmony to perforr specific functions to keep you healthy and alive. Lesson 1 What Are Tissues? Essential Learnings: 6.3C.4, 6.3C.3 Lesson 2 What Are Your Body Systems? Essential Learning: 6.3C.4 Lesson 3 What Is the Integumentary System? Essential Learning: 6.3C.3 esson 4 What Is the Nervous System? Essential Learning: 6.3C.3 esson 5 What Are Sense Organs and Senses? Essential Learning: 6.3C.3 Chapter 5: Systems Work Together in Your Body Big Idea Living things are highly organized and have structures and systems with specific functions. God organized the structures and systems to work together to give life. son 1 What Do Bones Do? Essential Learning: 6.3C.3 Lesson 2 What Do Muscles Do? Essential Learning: 6.3C.3 Lesson 3 How Does Circulation Work? Essential Learning: 6.3C.3 Lesson 4 How Does Respiration Work? Essential Learning: 6.3C.3 Chapter 6: Safety and Care of the Body **Big Idea** Because our bodies are the temple of the Holy Spirit, we should take the best possible care of them. When illnesses or injuries happen, we should seek to relieve suffering as Christ did during His ministry on Earth. esson 1 What Do Health Professionals Do? Essential Learning: 6.5B.1 Lesson 2 How Can We Stay Safe? Essential Learning: 6 58 2 Lesson 3 What Do You Do in an Emergency?

Essential Learning: 6.5B.2

Unit THREE: EARTH AND SPACE SCIENCE Chapter 7: Minerals and Rocks Big Idea When God created Earth, He included a variety of minerals and rocks. People value rocks because they are useful and beautiful. Lesson 1 What Are Minerals? Essential Learning: 6.4A.2

Lesson 2 What Are Rocks and the Rock Cycle?
Essential Learnings: 6.4A.2, 5-8.D.1.d, 5-8.D.1.k
Lesson 3 What Minerals and Rocks Do We Use?
Essential Learning: 6.4A.2
Chapter 8: Our Dynamic Earth
Big Idea What was Earth like when God created it? We don't really know. Our Earth is always changing. A series of related processes causes these changes and works together to help create our environment and sustain life on Earth. Studying these processes helps us understand how Earth is changing and gives clues to how it may have changed in the past.
Lesson 1 What Is Earth's Structure?
Essential Learnings: 6.4A.1, 5-8.D.1.a
Lesson 2 How Does the Crust Move?
Essential Learnings: 6.4B.3, 5-8.D.1.b
Lesson 3 What Causes Earthquakes and Volcanoes?
Essential Learnings: 6.4B.3, 5-8.D.1.b
Chapter 9: Earth's Surface Features Change
Big Idea Water, glaciers, wind, and gravity are constantly causing the surface of our planet to change. They have left behind clues about the history of Earth.
Lesson 1 What Are Weathering, Erosion, and Deposition?
Essential Learning: 6.48.3
Lesson 2 How Is Soil Formed?
Essential Learning: 6.48.4
Lesson 3 How Are Landforms Created?
Essential Learnings: 6.4A.1, 6.4B.1
Chapter 10: How Life on Earth Has Changed
Big Idea Earth and its life forms have changed over time. Fossils provide clues about many of these changes.
Lesson 1 What Are Fossils?
Essential Learnings: 6.48.6, 5-8.D.2.b
Lesson 2 What Are Some Extinct Plants and Animals?
Essential Learnings: 6.48.7, 5-8.D.2.b
Lesson 3 What Is Geologic Time?
Essential Learnings: 6.4B.2, 6.4B.5,6.4B.8, 5-8.D.2.a

Unit FOUR: **PHYSICAL SCIENCE** Chapter 11: Properties and Changes of Matter Big Idea Objects are made of matter and have physical properties that can be observed and measured. Matter can be changed physically or chemically according to laws created by God. Lesson 1 What Are Physical Properties? Essential Learning: 6.2A.2 Lesson 2 What Are Physical Changes? Essential Learning: 6.2A.2 Lesson 3 What Are Chemical Changes? Essential Learning: 6.2A.2 Lesson 4 What Are Signs of a Chemical Reaction? Essential Learning: 6.2A.2 **Chapter 12: The Atomic Theory** Big Idea All matter in the Universe is composed of atoms, which is a sign of one Creator. God created this single building block with the ability to combine with other atoms to make different types of matter. Atoms were designed so small that they are not visible to the naked eye, making it difficult to study this creation. **Lesson 1** What Are the Building Blocks of Matter? Essential Learnings: 6.2A.1, 6.2A.3 Lesson 2 What Is the Periodic Table of Elements? Essential Learnings: 6.2A.4, 6.2A.5 Lesson 3 How Are Compounds and Molecules Related to Elements? Essential Learnings: 6.2A.1, 6.2A.3 Lesson 4 How Do Compounds and Mixtures Differ? Essential Learning: 6.2A.6 Chapter 13: Electricity Big Idea Electricity is a form of energy produced by charged particles. In w. or stored in a h echnology. Lesson 1 What Is Static Electricity Essential Learning: 6.2C.4 Lesson 2 What Is Electric Current? Essential Learnings: 6.2C.4, 6.2C.5 Lesson 3 What Are Batteries? Essential Learning: 6.2C.6 Lesson 4 What Are Electric Circuits? Essential Learning: 6.2C.6 Lesson 5 What Are Electronics Essential Learning: 6.2C.6 Chapter 14: Electricity and Magnetism Are Related Big Idea Magnets draw certain materials to themselves. They can be used to generate electricity, and electricity can be used to create magnets. Electricity and nagnetism working together have been used to create generators and motors hat power many things we use every day Lesson 1 What Are Maanets? Essential Learning: 6.2C.1 Lesson 2 How Are Electricity and Magnetism Related? Essential Learnings: 6.2C.2, 6.2C.3 Lesson 3 What Is a Generator and a Motor?

Lesson 4 How Is Electricity Used and Conserved?

Program Developed in Collaboration with the Seventhday Adventist NAD Office of Education and Kendall Hunt Religious Publishing, A Division of Kendall Hunt Publishing

Key: Multi-Grade Classroom Cycles 1-4

	Cycle 1	Cycle 2	Cycle 3	Cycle 4
<u>1st Qtr</u> Life Science	Classification Vertebrates Origin of Life	Living Organisms Cells Genetics	Overview of Life Adaptation Ecology	Bacteria Fungi Protists Plants
2nd Qtr Human Body Health	Body Organization Skeletal Muscular System Reproductive System Human Growth and Development	Immune System Disease Communicable Disease Genes and Disease	Respiratory System Circulatory System Digestive System Excretory System Sexuality	Life Style and Health Health Choices Health Professionals Safety First Aid
<u>3rd Qtr</u> Physical Science	Forms of Energy Electromagnetic Spectrum Energy Waves Light/Sound Energy Movement	Magnetism Electricity	Forces Motion Machines	Matter Properties of Matter Atomic Theory Chemical Bonds Chemical Reactions
<u>4th Qtr</u> Earth Science	Weather Climate Oceans	Minerals Rocks Earth's Structure Earth Processes Earth History	Exploring Space Solar System Stars Galaxies Universe	Earth's Resources Conservation Climate Change

Lesson 1 What Are Work and Power?

ling: 5.28.2

Lesson 3 What Are Compound Machines?

esson 2 What Are Simple Machines?

Essential Learnings: 5.2B.1, 5.2B.2

Essential Learning: 5.2B.1



Grade 7

Unit ONE: LIFE SCIENCE

Chapter 1: Bacteria, Fungi, and Protists
Big Idea All living things are classified into groups according to th characteristics they share. Microscopic organisms such as bacteria, protists, and fungi are alike because most cannot be seen without magnification. Each can be either beneficial or harmful.
Lesson 1 How Are Living Things Classified?
Essential Learning: 5-8.C.5.a
Lesson 2 What Are Bacteria?
Essential Learnings: 7.3A.3, 7.3D.1, 5-8.C.1.b
Lesson 3 What Are Protists?
Essential Learning: 7.3A.3
Lesson 4 What Are Fungi?
Essential Learnings: 7.3A.3, 7.3D.1, 5-8.C.1.b
Chapter 2: Characteristics of Invertebrates
Big Idea God made the majority of animal species without backbones. These invertebrates are found in diverse environments and exhibit fascinating variety.
Lesson 1 How Are Invertebrates Classified?
Essential Learning: 7.3A.1
Lesson 2 What Are Sponges, Cnidarians, and Worms?
Essential Learnings: 7.3A.2, 5-8.C.1.a
Lesson 3 What Are Mollusks and Echinoderms?
Essential Learnings: 7.3A.2, 5-8.C.1.a
Lesson 4 What Are Arthropods?
Essential Learnings: 7.3A.2, 5-8.C.1.a

Essentia

Lesso

Essenti

Lesson 5 How Do Invertebrates Use Their Senses? Essential Learnings: 7.3A.2, 7.3E.3, 5-8.C1.a **Chapter 3: Characteristics of Vertebrates**

Big Idea Vertebrates are animals with backbones. God created a wide variety of vertebrates, which include fish, amphibians, reptiles, birds, and mammals.
Lesson 1 What Are Fish?
Essential Learnings: 7.3A.1, 5-8.C.1.a
Lesson 2 What Are Amphibians and Reptiles?
Essential Learnings: 7.3A.1, 7.3E.2, 5-8.C.1.a
Lesson 3 What Are Rirds and Mammals?

al Learnings: 7.3A.1, 7.3E.2, 5-8.C.1.a
n 4 How Do Vertebrates Behave and unicate?
al Learnings: 7.3E.3, 5-8.C.3.c

Chapter 4: How Organisms Inherit Traits Big Idea God designed organisms that inherit traits from their parents via genes, or segments of DNA. Patterns of inheritance can often be predicted if the genetic make-up of the parents is known. Lesson 1 How Are DNA, Genes, and Cell Division **Connected?**

Essential Learnings: 7.3D.3, 7.3D.4, 7.3D.5, 5-8.C.2.c, 5-8.c2.d, 5-8.C.2.e
Lesson 2 What Is Simple Inheritance?
Essential Learnings: 7.3d.3, 5-8.c.2.B
Lesson 3 What Is Complex Inheritance?
Essential Learnings: 7.3D.3, 5-8.C.2.d
Lesson 4 What Is Genetic Engineering?
Essential Learnings: 7.3D.2, 5-8.E.2.a, 5-8.E.2.e, 5-8E.2.f, 5-8.F.4.a

Unit TWO: THE HUMAN BODY

Chapter 5: Human Development and Sexuality
Big Idea Becoming an adult involves physical changes in your body and changes in the way you interact with others.
Lesson 1 How Do Organisms Reproduce?
Essential Learnings: 5-8.C.2.a, 5-8.C.2.b
Lesson 2 What Are Challenges of Sexual Maturity?
Essential Learning: 7.5A.1
Lesson 3 Why Is Sexual Abstinence Important?
Essential Learnings: 7.5A.1, 7.5C.2, 7.5D.1, 7.5F.1, 5-8.F.1.f, 5-8.F.4.d
Chapter 6: Infectious Diseases
Big Idea Knowing how disease is spread and how the immune system protects you from disease can help you stay healthy.
Lesson 1 How Does The Immune System Protect the Body?
Essential Learnings: 7.3E.4, 5-8.C.1.e
Lesson 2 What Are Infectious Diseases?
Essential Learnings: 7.58.2, 5-8.C.1.f
Lesson 3 How Are STDs Prevented?
Essential Learnings: 5-8.F.4.b, 7.5B.2, 5-8.F.5.c
Lesson & How Does the World Combat Disease?

Lesson 4 How Does the World Combat Disease? Essential Learnings: 7.5D.3, 5-8F.5.b Chapter 7: Other Systems of the Human Body

Big Idea The human body is a marvel. God designed the body's systems to work together to in harmony to ensure good health. Lesson 1 How Does the Digestive System Work? Essential Learnings: 7.3E.4, 5-8.C.1.e

Lesson 2 How Does the Excretory System Work? Essential Learnings: 7.3E.4, 5-8.C.1.e

Unit THREE:
EARTH AND SPACE SCIENCE
Chapter 8: Objects in Our Solar System
Big Idea When God created the Sun and the planets and their moons, He also created the many other objects that make up our Solar System.
Lesson 1 What Are the Planets in Our Solar System?
Essential Learnings: 7.4C.7, 5-8.D.3.a, 5-8.D.3.c
Lesson 2 What Other Objects Are in Our Solar System?
Essential Learnings: 7.4C.7, 1B.2
Lesson 3 How Do We Study Space?
Essential Learnings: 7.4C.5, 5-8.G.3.c
Chapter 9: The Effects of Earth's Movement
Big Idea When God created our Solar System, He made Earth and the Moon to move in repeating patterns. The movements of Earth around the Sun and the Moon around Earth cause day and night, seasons, tides, moon phases, and eclipses.
Lesson 1 How Does Earth Move in Space?
Essential Learnings: 7.4C.6, 5-8D.3.b
Lesson 2 Why Does the Earth Have Seasons?
Essential Learnings: 7.4C.6, 5-8.D.3.d
Lesson 3 How Do the Earth, the Sun, and the Moon Interact?
Essential Learnings: 7.4c.6, 5-8.d.3.C, 5-8.D.3.b.
Chapter 10: Stars, Galaxies, and the Universe
Big Idea God created the Universe by simply speaking. God designed the billions of galaxies that make up the Universe and the billions of stars that are found in each galaxy.
Lesson 1 What Are the Properties of Stars?
Essential Learnings: 7.4C.3, 7.4C.4, 5-8.A.2.e
Lesson 2 What Are Galaxies?
Essential Learnings: 7.4C.1, 7.4C.2
Lesson 3 How Did the Universe Begin? Essential Learnings: 7.4C.1, 7.4C.2
Unit FOUR: PHYSICAL SCIENCE
Chapter 11: Energy Waves
Big Idea Without the energy God created, the Universe could not operate and life could not exist. Waves transfer energy from one place to another.
Lesson 1 What Are Transverse and Compressional Waves?
Essential Learnings: 7.2B.6, 5-8.B.2.a
Lesson 2 What Are the Properties of Sound?
Essential Learnings: 7.2B.6, 5-8.B.2a
Lesson 3 What Is the Electromagnetic Spectrum?
Essential Learnings: 7.2B.6, 7.2D.1
Lesson 4 What Are the Properties of Light?
Essential Learnings: 7.2B.6, 5-8.B2.a.
Chapter 12: Motion and Force
Big Idea God's natural laws control forces in the universe and how forces affect objects and other forces.
Lesson 1 How Can Motion Be Described?
Essential Learnings: 7.2B.6, 5-8.B.2.a
Lesson 2 How Are Acceleration and Momentum Determined?
Essential Learnings: 7 28 6 5-88 2a

Essential Learnings: 7.2B.6, 5-8B.2a esson 3 How Do Forces Affect Motion?

Essential Learning: 7.2b.6 Lesson 4 What Are Some Forces Around Us? Essential Learnings: 7.2B.1, 7.2B.3, 7.2B.4, 5-8B.2.c Chapter 13: Power, Work, and Machines

Big Idea Machines provide the power to accomplish more work easier and faster. God's power helps us do the work He wants us

Lesson 1 How Are Work and Power Related? Essential Learnings: 7.28.8, 7.28.7

Lesson 2 What Are Inclined Planes, Wedges, and Screws? Essential Learning: 5-7B.3.a

Lesson 3 What Are Levers, Wheels and Axles, and Pullevs

Essential Learnings: 7.2C.5, 5-8.B.3.c Chapter 14: Energy Transferred and Transformed

Big Idea We use various forms of energy every day. God gave us he ability to transform one form of energy into another form of energy to make life on Earth even better.

sson 1 What Are the Forms of Energy?

Essential Learnings: 7.2.C.3, 7.2.C.3 esson 2 How is Energy Transformed?

Essential Learnings: 7.2C.4, 7.2C.3, 5-8.B.3.c

esson 3 What Is Thermal Energy? Essential Learnings: 7.2C.1, 5-8.B.3.c

sson 4 How Is Thermal Energy Transferred?

Essential Learnings: 5-8.B.3.e, 7.2C.1, 5-8.B.3.a, 5-8.B.3.b

Big Idea There are many ideas about the origins of life. Several kinds of scientific evidence are consistent with the biblical story of Creation by God.
Lesson 1 What Are Theories of Origins?
Essential Learnings: 8.4C.2, 8.4C.1
Lesson 2 What Does the Evidence Show?
Essential Learnings: 8.4C.4
Lesson 3 What Is Phylogenetics?
Essential Learnings: 5-8.A.2.d, 5-8.A.2.f
Chapter 2: Types of Plants
Big Idea As in all of Creation, God created unique flora. Flora, or plants, are diverse in their form and distribution, but they can be grouped according to certain shared characteristics.
Lesson 1 How Are Plants Classified?
Essential Learnings: 8.3A.1, 8.3D.1
Lesson 2 What Are Spore-Producing Plants?
Essential Learnings: 8.3A.1, 8.3D.1
Lesson 3 What Are Gymnosperms?
Essential Learnings: 8.3A.1
Lesson 4 What Are Angiosperms?
Essential Learning: 8.3A.1
Chapter 3: How Plants Survive
Big Idea God designed plants with the ability to make their own food and adapt to their surroundings. As caretakers of God's Creation, humans should work to protect plant species.
Lesson 1 How Do Plants Capture Energy?
Essential Learning: 8.3C.1
Lesson 2 What Are Plant Adaptations?
Essential Learnings: 8.3E.1, 8.3F.1, 8.3F.2
Lesson 3 How Do Humans Affect the Survival of

Unit ONE:

LIFE SCIENCE

Chapter 1: How Life on Earth Has Changed

lants? Essential Learnings: 8.3B.4, 8.3F.3 **Chapter 4: How Animals Survive Big Idea** God designed living organisms to interact with one

another and their environment. He gave them the ability to adapt as their environments change. Lesson 1 What Affects Ecosystem Dynamics? Essential Learnings: 8.3B.5, 8.3B.2 Lesson 2 What Are Animal Adaptations? Essential Learnings: 8.3F.2, 8.3E.2 Lesson 3 What Changes Occur in Ecosystems? Essential Learnings: 8.3B.4, 8.3F.3

Lesson 4 How Do Animals Respond to Environmental Changes? Essential Learnings: 8.3F.1, 8.3F.3, 8.3B.1, 8.3F.3, 8.3G.1

Unit TWO:

THE HUMAN BODY
Chapter 5: Genes and Disease
Big Idea Your health can be affected by genes passed on to you from your parents, certain environmental factors, and your own daily choices.
Lesson 1 What Are Genetic Disorders?
Essential Learnings: 8.5C.1, 8.5C.1
Lesson 2 What is Cancer and How Is It Caused?
Essential Learnings: 8.5C.1, 8.5C.1
Lesson 3 What Can Trigger Genetic Disease?
Essential Learnings: 8.5C.1, 8.5C.1
Lesson 4 How Does Technology Keep People Healthy?
Essential Learnings: 8.5C.1, 8.5D.2
Chapter 6: Your Lifestyle Affects Your Body
Big Idea Your health is affected by the actions and choices you make daily. God gave you the ability to make these choices. Making wise choices to live a healthy life leads to a healthy body, and shows respect for God.
Lesson 1 How Do Drugs Affect Your Body?
Essential Learning: 5-8.F.1.d
Lesson 2 How Do Alcohol and Tobacco Affect Your Body?
Essential Learning: 5-8.F.1.c
Lesson 3 How Do Diet and Exercise Affect Your Body?
Essential Learning: 5-8.f.1.a.
Lesson 4 A Plan for Your Body
Essential Learning: 5-8.F.4.c.
Chapter 7: Making Decisions About Your Body
Big Idea God gave us free will so we can make our own decisions. To honor God we need to make wise decisions based on accurate, reliable information.
Lesson 1 How Can You Make Wise Decisions?

Essential Learning: 8.5.f.2

esson 2 How Do You Know Information Is Correct? Essential Learning: 8.5B.1 esson 3 How Can You Be an Informed Consumer? Essential Learning: 8.5B.3

Grade 8

	Unit THREE: EARTH AND SPACE SCIENCE
Chapt	er 8: The Atmosphere, Weather, and Climate
resultin God de	ea Earth's atmosphere interacts with Earth's surface, ng in movement of air, water, and energy around Earth. signed these processes when He created Earth to make the a suitable home for living things.
Lesso	on 1 What Makes Up Earth's Atmosphere?
Essent	tial Learnings: 8.4B.4, 8.4B.11
Lesso	on 2 Where Is Earth's Water?
Essent	tial Learning: 8.48.6
Lesso	on 3 How Are Air Pressure and Winds Linked?
Essent	tial Learnings: 8.4B.4, 8.4B.11
	on 4 How Are Weather Patterns and Severe ns Related?
Essent	tial Learnings: 8.4B.4, 8.4B.11
Lesso	on 5 What Is Climate?
Essent	tial Learning: 8.4B.3
Chapt	er 9: Resources and Their Uses
	ea Interactions among living things and nonliving things Earth's climate and its land, water, and air resources.
Lesso	on 1 How Can We Use Resources Wisely?
Essent	tial Learnings: 8.3B.3, 8.4A.1, 5-8.F.2.b, 5-8.F.3.b
Lesso	on 2 How Have People Affected the Land?
Essent	tial Learnings: 8.3b.3, 8.4A.1
	on 3 How Have People Affected Earth's Water urces?
Essent	tial Learnings: 8.3B.3, 8.4A.1, 5-8.F.4.b.
	on 4 How Have People Affected Earth's sphere?
Essent	tial Learnings: 8.4A.1, 5.4B.5
	er 10: Earth's History
change	ea Since Creation, Earth's surface has gone through many 25. Geologic processes and events such as the global flood 25. Apped Earth's surface throughout history.
Lesso	on 1 How Does Earth Change?
Essent	tial Learnings: 8.4B.1, 8.4C.3, 8.4B.2
Lesso	on 2 How Old Are Earth and Its Layers?
Essent	tial Learnings: 8.4B.3, 8.4C.5, 5-8.D.2.b.
Lesso	on 3 What Does the Fossil Record Show?
Essent	tial Learnings: 8.48.1, 8.4C.3, 8.4B.2

Unit FOUR: PHYSICAL SCIENCE

Chapter 11: Ways Matter Changes **Big Idea** Physical properties can be used to classify matter and explain how it changes. These changes make it possible for us to use matter in many different ways. Lesson 1 What Are Physical Changes? Essential Learnings: 8.2A.2, 8.2A.2 Lesson 2 What Are Mixtures and Solutions? Essential Learnings: 8.2A.2, 8.2A.2 esson 3 What Are Acids and Bases? Essential Learnings: 8.2A.3, 8.2A.2, 8.2A.4 Chapter 12: Elements and the Periodic Table Big Idea Everything you can see, touch, smell, and taste is made of atoms. Atoms can be organized by their properties and behaviors. Their interactions are predictable because of the laws that govern their structure Lesson 1 What Are Atoms? Essential Learnings: 8.2A.5, 8.2A.1 Lesson 2 How Are Elements Organized? Essential Learning: 8.2A.5 sson 3 What Are Metals Essential Learning: 8.2A.1 Lesson 4 What Are Nonmetals and Metalloids? Essential Learning: 8.2A.1 Lesson 5 What Are Radioactive Elements? Essential Learnings: 8.2A.5, 8.2A.1 Chapter 13: Types of Chemical Bonds Big Idea God's natural laws that govern the planets and galaxies also govern the atoms and the bonds they form with one another. Lesson 1 How Do Chemical Bonds Form? Essential Learning: 8.2A.1 Lesson 2 How Do Covalent Bonds Form? Essential Learning: 8.2A.1 Lesson 3 How Are Chemical Formulas Helpful? Essential Learnings: 8.2A.1, 8.2A.8 **Chapter 14: Chemical Reactions** Big Idea New substances can form when electrons from different toms interact. These interactions happen according to physical laws God established at Creation. Lesson 1 How Can We Observe Chemical Changes? Essential Learnings: 8.2A.1, 8.2A.5 Lesson 2 How Can We Describe Chemical Essential Learning: 8.2A.5

Lesson 3 How Can We Control Chemical Reactions? Essential Learnings: 8.2A.6, 8.2A.7

Essential Learnings are described in detail as an Online Teacher Resource.