



### COMPUTER SCIENCE AND TECHNOLOGY

- Algorithms and Programming
- Computers and Data
- Computers and Society
- Computing Systems
- Cyberbullying
- Cybersecurity
- Drones
- Networks
- Robots
- Self-Driving Cars
- Smart Devices
- Smart Phones

### EARTH SCIENCE

- What Is the Lithosphere?

#### Atmosphere

- Greenhouse Gases and Global Warming
- Humans and the Atmosphere
- Layers of the Atmosphere
- Natural Wonders in the Sky

#### – Weather and Climate

- Blizzards
- Climate Types
- Clouds
- Drought
- Floods
- Forecasting Weather
- Hurricanes
- Measuring and Mapping Weather
- Tornadoes
- Weather and Climate
- Weather Patterns
- Wildfires

#### Geosphere

- Erosion and Weathering
- Humans and the Earth
- Natural Wonders of the Earth
- Tectonic Plates
- What Is the Geosphere?

#### – Earth Materials

- Fossils
- Igneous Rocks
- Metamorphic Rocks
- Minerals
- Rock Layers and the Rock Cycle
- Sedimentary Rocks
- Soil

#### – Natural Disasters

- Avalanches
- Earthquakes
- Tsunamis
- Volcanic Eruptions

#### – Natural Resources

- Natural Resources and the Environment
- Nonrenewable Resources

- Renewable Resources

#### Hydrosphere

- Great Pacific Garbage Patch
- Humans and the Hydrosphere
- Natural Wonders in the Water
- What Is the Hydrosphere?

#### – Water Sources

- Glaciers
- Lakes
- Oceans
- Streams and Rivers
- The Water Cycle

#### Planets and the Solar System

##### – Planets

- Dwarf Planets
- Earth
- Jupiter
- Mars
- Mercury
- Neptune
- Saturn
- Uranus
- Venus

##### – Stars and the Solar System

- Asteroids, Meteors, and Comets
- Black Holes
- Space Exploration
- Stars and Constellations
- The Milky Way and Other Galaxies
- The Moon and Its Phases
- The Sun

### PHYSICAL SCIENCE

#### Energy

- Conservation of Energy
- Electricity and Currents
- Energy and Forces
- Fossil Fuels
- Light Energy
- Potential and Kinetic Energy
- Sound Energy
- Thermal Energy
- What Is Energy?

#### Forces and Motion

- Electromagnetism
- Friction
- Gravity
- Magnetism
- What Are Forces and Motion?

#### – Isaac Newton's Laws

- Newton's 1st Law
- Newton's 2nd Law
- Newton's 3rd Law

#### Matter

- Atoms
- Elements and the Periodic Table
- Molecules and Compounds
- Properties of Matter

#### – States of Matter

- Chemical Changes
- Gases
- Liquids
- Physical Changes
- Solids
- Simple Machines

#### Waves

- Light Waves
- Radio Waves
- Sound Waves
- Waves and Their Properties
- X-Rays

### LIFE SCIENCE

#### Genetics

- Animal Cells
- Artificial Selection
- Cell Division
- Genes, Chromosomes, and DNA
- Genetic Mutations
- Heredity
- Plant Cells

#### Human Anatomy

- Organs
- The Senses
- Tissues

#### – Human Body Systems

- Circulatory System
- Digestive System
- Endocrine System
- Excretory System
- Immune System
- Muscular System
- Nervous System
- Reproductive System
- Respiratory System
- Skeletal System

#### Life in an Ecosystem

- Deforestation
- Humans and the Biosphere
- Pollution
- What Is the Biosphere?

#### – Biomes

- Caves
- Coniferous Forests
- Deserts
- Grasslands
- Mountains
- Oceans
- Rain Forests
- Savannahs
- Temperate Forests
- Tundras
- Wetlands

#### – Food Chains and Webs

- Biodiversity
- Food Chains
- Food Webs

- Invasive Species

- Life Cycles
- Photosynthesis

#### Plants and Animals

##### – Adaptation and Natural Selection

- Adaptation
- Endangered Species
- Evolution
- Extinction
- Natural Selection

##### – Traits and Behaviors

- Camouflage
- Group Behavior
- Hibernation
- Inherited Traits
- Learned Traits
- Metamorphosis
- Migration
- Mimicry

### THE FIELD OF SCIENCE

#### Jobs in Science

- Jobs in Earth Science
- Jobs in Life Science
- Jobs in Physical Science
- Machine Learning Engineers
- Mobile App Developers
- Software Engineers
- Web Developers

#### Science and Engineering Practices

- Asking Questions
- Forming Explanations and Solutions
- Information Technology
- Planning and Carrying Out Investigations