

Science Program: The Scott Foresman text series is used in teaching national and statewide science benchmarks to the third through fifth graders. Sixth through seventh graders learn national and statewide science benchmarks through the use of the Glencoe Science series. The sixth through eighth grade science program in an integrated approach and no longer divided by earth science, life science and biological science. The Scientific Method is taught and reinforced throughout our curriculum.

Sixth grade science explores a mixture of life science, earth science and biological science through the following topics:

1. Life Forms & Forms
 - a. Living things
 - b. Classification
 - c. Cells & their Jobs
 - d. Bacteria: Benefits & Negatives
2. Variety of Living Things:
 - a. Protists
 - b. Fungi
 - c. Seedless & Seed Plants
 - d. Animals
 - e. Invertebrates
 1. Explanation of an Animal
 2. Some Types: sponges, cnidarians, flatworms, roundworms, mollusks, segmented worms, arthropods, and echinoderms
 - f. Vertebrates
 1. Chordate Animals
 2. Amphibians & Reptiles
 3. Birds
 4. Mammals
3. Environment & Living Things
 - a. Environment Explanation
 - b. Interactions of Populations
 - c. Matter
 - d. Energy: resources, alternative resources, water & land
4. Earth's Atmosphere
 - a. Energy Transfer
 - b. Air Movement
 - c. Weather, Weather Patterns, & Forecasts
 - d. Oceans: water, currents, climate, waves, and ocean life
5. Earth & Space
 - a. Minerals
 - b. Rocks: igneous, sedimentary, metamorphic, & rock cycles
 - c. Forces within: earthquakes
 - d. Landforms
 - e. Erosions
 - f. Outer Space: solar system, stars & galaxies
6. Matter, Forces & Energy
 - a. Physical Properties & Changes
 - b. Chemical Properties & Changes
 - c. Newton's Laws of Motion
 - d. Work & Simple Machines
 - e. Energy Changes
 - f. Temperature
 - g. Chemical Energy
7. Electricity & Magnetism
 - a. Electric Charge
 - b. Electric Current
 - c. Electric Circuits
 - d. Definition of Magnetism
 - e. Electricity & Magnetism

Skill Building: classifying, communicating, compare and contrast, concept mapping, drawing conclusions, forming hypotheses, interpreting scientific illustrations, making & using graphs, making & using tables, making models, measuring, observing & interfering, predicting, recognizing cause & effect, recording observations, researching information

Seventh grade science is a mixture of life science, earth science and biological science through the following topics:

1. Skills, Tools & Methods of Science
 - a. Definition of Science
 - b. Technology & Science
 - c. Measurement
 - d. International Units of Science (SI Units)
 - e. Drawings, Tables & Graphs
2. Life's Building Blocks & Processes
 - a. Structure of Cells
 - b. Viruses
 - c. Nature of Matter
 - d. Passive & Active Transport
 - e. Endocytosis & Exocytosis
 - f. Photosynthesis & Respiration
 - g. Tropisms & Hormones Effects on Plants
 - h. Plant Respiratory & Excretion
 - i. Animal Behavior & Interactions
3. Reproduction & Heredity
 - a. Cells
 1. Division
 2. Mitosis
 3. Sexual Reproduction
 4. Meiosis
 - b. DNA
 - c. Plants
 1. Seedless Reproduction
 2. Seed Reproduction
 - d. Humans
 1. Endocrine System
 2. Reproductive System
 3. Life Stages
 - e. Genetics
 1. Mendel & Genetics
 2. Advances in Genetics
4. Ecology
 - a. Living Environments
 1. Biosphere
 2. Ecosystems
 3. Populations
 4. Community Interactions
 - b. Non Living Environments
 1. Abiotic Factors
 2. Cycles of Nature
 3. Energy Flow
5. Earth and Solar System
 - a. Drifting of the Continents
 - b. Spread of the Ocean Floor
 - c. Theory of Plate Tectonics
 - d. Earth Disruptions
 1. Earthquakes
 2. Volcanoes
 3. Plate Tectonics
 - e. The Ocean
 1. Water
 2. Currents
 3. Waves & Tides
 - f. Earth's Physical Data
 1. Motion & Seasons
 2. Moon's Influence
 3. Influence of the Solar System
6. Building Blocks of Matter
 - a. Atoms & Combinations of Atoms
 - b. Properties of Atoms
 - c. Physical Properties of Matter
 - d. Chemical Properties of Matter
7. Waves, Sound & Light
 - a. Definition of Waves
 1. Properties of Waves
 2. Wave Behavior
 - b. Definition of Sound
 1. Music
 2. Reflection of Sound
 - c. Electromagnetic Waves
 1. Spectrum
 2. Using Electromagnetic Waves
 - d. Light, Mirrors & Lenses
 1. Light Properties
 2. Reflection & Mirrors
 3. Refraction & Lenses
 4. Using Mirrors & Lenses

Skill Building: classify, communicate, compare & contrast, concept mapping, draw conclusions, form hypotheses, interpret scientific illustrations, make & use graphs, make & use tables, make models, measure in SI, predict, recognize cause & effect, research information, test a hypothesis

Eighth Grade science is an integrated program combining physical science, biological science, earth science and life science.

1. Astronomy
 - a. Space Exploration
 1. Radiation
 2. Early Space Missions
 3. Current & Future Space Missions
 - b. Earth
 1. Earth's Satellite
 2. Moon Exploration
 - c. Solar System
 1. Location of Planets
 2. Other Objects in the Solar System
 3. Stars & the Sun
 4. Evolution of Stars
 5. Galaxies
2. Human Body Systems
 - a. Skeletal System
 - b. Muscular System
 - c. Skin
 - d. Nutrition
 - e. Digestive System
 - f. Circulatory System & Blood
 - g. Lymphatic System
 - h. Immune System
 1. Infectious Diseases
 2. Non-infectious Diseases
 - i. Nervous System & Senses
3. Heredity
 - a. Genes
 1. Reproduction
 2. Genetics
 - b. Adaptations
 1. Evolution Ideas
 2. Hints of Evolution
 3. Evolution of Primates
4. Resources
 - a. Conserving Life
 1. Variety of Life in Ecosystems
 2. Conservation Biology
 - b. Conserving Resources
 1. Natural Resources
 2. Pollution
5. Weather and Climate
 - a. Atmosphere
 - b. Earth's Weather
 - c. Air Masses & Weather Fronts
 - d. Climate: Types and Changes
6. Chemistry of Matter
 - a. Various Models of Atoms
 - b. Nucleus
 - c. Periodic Table
 1. Representative Elements
 2. Transition Elements
 - d. Chemical Bonds
 1. Purpose for Combining Atoms
 2. Process of Bonding Elements
 - e. Chemical Reactions
 1. Formulas & Equations
 2. Rates of Reactions
7. Forces and Motion
 - a. Motion Definition
 1. Acceleration
 2. Momentum
 - b. Force & Newton's Law
 1. Newton's 1st Law
 2. Newton's 2nd Law
 3. Newton's 3rd Law
 - c. Forces & Fluids
 1. Pressure
 2. Reasons Objects Float
 3. Work with Fluids

3. Reduce, Reuse & Recycle

Skill Building: calculating ratios, classifying, communicating, comparing & contrasting, concept mapping, drawing conclusions, forming hypotheses, forming operational definitions, interpreting data, interpreting scientific illustrations, making & using graphs, making & using tables, making models, predicting, recognizing cause & effect, researching information, sequencing