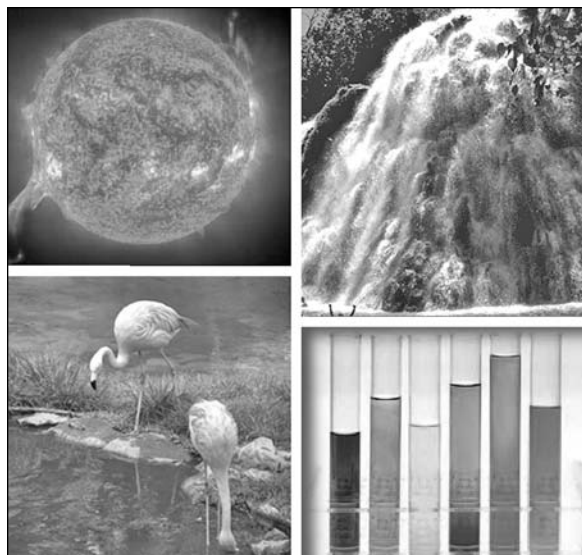


ELEMENTARY SCIENCE III

Earth, Life and Physical Science



12 15-min. Programs
Grades 3-5
Teacher's Guide
SOL Correlations Below

ELEMENTARY SCIENCE is back with season III and is full of new adventure and discovery. This series covers the topics outlined in the National Science Education Standards, AAAS Benchmarks for Science Literacy and major texts. "You compare" and "You Decide" segments ask students to actively engage in each video. Each video is followed by a 5-question on screen video quiz and is accompanied by a 25-page teacher guide containing numerous student activities and assessment tools.

1. Everyday Simple Machines — This program explores the six major types of simple machines with practical, colorful examples of each. Vivid video footage illustrates how each of the following simple machines works and makes our lives easier: levers, inclined planes, wedges, screws, wheels and axles, and pulleys.
Science: 3.2

2. Weather Around Us — This program introduces students to some of the fundamentals of weather including air pressure, wind and moisture. The basic principles of cloud formation and precipitation are explored.
Science: 4.6

3. Weather on the Move — This video program investigates some of the key elements responsible for weather formation. Different types of air masses and their origins are investigated as are the formation of weather fronts. Specific weather phenomenon including tornados, hurricanes and thunderstorms are illustrated in detail.
Science: 4.6

4. The Rock Cycle — The characteristics of igneous, sedimentary and metamorphic rocks are highlighted through vivid footage and colorful animations. This video also covers how rocks are transformed into other rocks via weathering, erosion, deposition, compaction and cementation, melting, heat and pressure.
Science: 5.7

5. Minerals — This program covers the major characteristics of minerals while exploring the roles minerals play in our lives. Crystal structures and examples of the wide range of minerals are shown. Footage from across the world shows the processes by which minerals form. Properties used to identify minerals are identified.
Science: 4.8

6. Rocks — This program introduces students to the general characteristics of rocks by discussing the components of rock classification. On-location footage from throughout North America vividly depicts characteristics and origins of the three major rock types: igneous rocks, sedimentary rocks and metamorphic rocks.
Science: 4.8

7. Electricity — This video explores electrical charge and electrical current energy using animations. Static electricity and the role it plays in creating lightning are also described. The ways we use electricity are cited.
Science: 4.3

8. Electrical Circuits — This program explores electric current and its role in electrical circuits. It describes the parts of an electrical circuit, compares parallel circuits with series circuits and shows electrical safety fundamentals.
Science: 4.3

9. Magnets and Electromagnetism — The properties of magnets and the characteristics of magnetic force are explored. The function of magnets in generating electricity is explained. Electromagnets and their many uses are demonstrated as well. Colorful graphics and real-life footage make viewing interesting, pertinent and enjoyable.
Science: 4.3

10. The Water Cycle — The continuous process by which water moves through the environment via the water cycle is explored. Beautiful footage from around the world illustrates how the sun drives the various aspects of the water cycle. Descriptive animations show the processes of evaporation, condensation and precipitation.
Science: 3.9

11. Life Cycles — This program about the life cycles of living organisms specifically focuses on plants and animals. Exciting footage and along with colorful animations show how living things change as their lives progress.
Science: 4.5

12. Adaptations — This program explores adaptations that humans, plants, animals and all living things exhibit. Beautiful instructive footage from across the world, including the Galapagos Islands, Canadian Rockies and New England, depicts adaptations for getting food, finding a mate and escaping predators.
Science: 3.4, 4.5

