

Chemistry

All About Heat

593132 VH

P 23 min CA 2000 Library Video Company

Energy for Children Series - Closed-captioned. Defines heat energy and shows how we use it. Demonstrations show expansion, contraction, convection, and creating a thermometer. Teacher's guide.

Heat; Energy

All About Properties of Matter

026889 VH, DV

PI 23 min CA 2000 Schlessinger Video Productions

Physical Science for Children Series - Closed-captioned. Shows that all objects are made of matter and can be described with scientific properties of mass, weight, volume, and density. Also introduces the basic forms of matter, solid, liquid, and gas. Uses activities such as an egg suspended in a beaker of water to show density, real-life examples, and graphics. Both VHS and DVD contain In-case Teacher's guide. DVD contains: 1 Disc with Discussion Questions and Activities, Investigation Data Sheet, and Chapter Select.

Matter

All About Solids, Liquids, and Gases

026895 VH, DV

PI 23 min CA 2000 Schlessinger Video Productions

Physical Science for Children Series - Closed-captioned. Introduces the three common forms of matter. Shows how the form is determined by the movement of atoms. Real-life examples, graphics, and activities illustrate how matter changes from one form to another. DVD contains: 1 Disc with Spanish language track; Discussion questions and activities, Investigation data sheet, Chapter select, and both VHS and DVD contain In-case teacher's guide.

Solids; Gases; Matter; Liquids

All About the Conservation of Energy

593133 VH

P 23 min CA 2000 Library Video Company

Energy for Children Series - Closed-captioned. Shows students that fossil fuel supplies are limited and that they have a role in reducing energy consumption and developing renewable energy sources. Teacher's guide.

Energy; Energy Conservation

All About the Transfer of Energy

593134 VH

P 23 min CA 2000 Library Video Company

Energy for Children Series - Closed-captioned. Defines potential and kinetic energy and how energy transfers between these two states. Includes several examples with sports and an activity on increasing potential energy. Teacher's guide.

Energy

All About the Uses of Energy

593135 VH

P 23 min CA 2000 Library Video Company

Energy for Children Series - Closed-captioned. Shows what life was like before electricity and how our life has changed with the availability of electricity. Demonstrations show electricity being created and teaches students how to use energy from steam. Teacher's guide.

Energy; Electricity

Alternative Energy

590531 VH

IMJSA 16 min 2001 Raintree Steck Vaughn Publishers

Primary Source Science Series - A collection of 8 short CNN news reports on developments in alternative energy sources including wind, solar, geothermal, and methane. Useful for discussion starters and for teaching information skills. Teacher's guide.

Energy; Wind Power; Solar Energy; Primary sources

Applied Chemistry

591550 VH

S 16 min 2001 Benchmark Media

Science Key Concepts Series: Chemistry - Three concepts - ammonia and fertilizer, plastics and polymerization, and sulfur and sulfuric acid are explored and illustrated with computer animation and experiments. Teacher's guide.

Chemical Reactions

Archibald Frisby

024386 VH, DV

P 30 min CA 1995 GPN Educational Media

Reading Rainbow Series - Closed-captioned. Archibald is sent to camp to make him have fun instead of studying all the time. Instead he uses his scientific prowess to make his camp experience better for himself and his new friends. Hosted by LeVar Burton. Author and illustrator: Michael Cheshworth. Teacher's guide. DVD contains: 1 Disc.

Critical Thinking; Language Acquisition; Scientific Method

Atomic Structure and the Periodic Table

594275 VH

S 23 min 2004 Schlessinger Video Productions

The Periodic Table for Students Series - Closed-captioned. Explore experiments by scientists Thomson and Rutherford which led to the discovery of subatomic particles and nuclear theory. The shape of the periodic table is based on this theory. Teacher's guide sheet and Guide to the Elements booklet.

Periodic Table of the Elements; Atoms

Atomic Structure: Mapping an Invisible World

025185 VH

MJS 22 min 1996 Great Pacific Media

Chemistry Essentials Series - Animation brings to life the invisible world of the atom and explains how models of the atom have changed over time. Looks at the atomic models of Dalton, Rutherford, Bohr, and contemporary physicists. Outlines subatomic particles, isotopes, atomic number, mass, and radioactive particles. Shows how radioactive isotopes are used to detect and fight disease, monitor the flow of pesticides through the environment, and to date fossil remains.

Atoms; Atomic Theory; Chemistry

Basics of Cell Biology Series

For descriptions see individual titles:

Glycolysis and Cellular Respiration: The Biology of Energy [596397]

Bill Nye the Science Guy Series

For descriptions see individual titles:

Chemical Reactions [592973]
Chemical Reactions/Phases of Matter [024461]
Energy [596048]
Fluids [591005]
Heat/Energy [024464]
Motion [591008]
Phases of Matter [596052]
Waves/Wind [024458]

Bill Nye: The Way Cool Game of Science Series

For descriptions see individual titles:

Energy Transfer [596319]
Force and Motion [596317]
Matter [596318]

Biology: The Science of Life Series

For descriptions see individual titles:

The Flow of Matter and Energy in the Living World: Photosynthesis and Cellular Respiration [591177]

Chemistry

Biomass: The Strategy of Renewability

591569 VH

S 25 min 2000 Landmark Media
The Prometheus Principle Series - Shows how energy can be extracted from vegetable materials using a wide variety of methods - all efficient and friendly to the environment. Examples are from several European countries.

Energy Resources; Energy

Bohr's Model of the Atom

596276 DV

S 26 min 2006 Video Education America

Focuses on Niels Bohr, 20th century physicist who worked with some of the best physicists of the 20th century to develop his atomic model. Includes historical developments in atomic theories up to Bohr, a brief outline of Bohr's life, Bohr's first and second postulates, and his influence on contemporary society. Contains: 1 Disc.

Science - History; Atomic Theory; Atoms

A Brief History of Chemistry

593729 VH

S 18 min CA 2003 Hawkhill Associates

Closed-captioned. A brief tour of the history of chemistry from its origins in ancient societies, its revolutionary progress in the Pneumatic Revolution of the 18th and 19th centuries, and its flowering in the 20th century. Teacher's guide.

Chemistry; Science - History

Bulbs, Batteries, and Wires (English Version)

022740 VH

PI 30 min 1992 New York State Education Department

Focus on Science Series - Hands-on demonstrations of electricity and energy transfer. Consists of 4 modules: Batteries and Circuits; Conductors; Energy Changes Form; and Switches. Teacher's guide.

Electricity; Energy

Career Day 1: Alternative Energy

597542 VH

IMJ 30 min CA 2009 Fairfax Network

Career Day Series - Career Day programs are designed to spark student interest in various STEM-related careers through virtual field trips into various days in the lives of our experts. The first program in the series focuses on alternative energy and green design. Students will get an up-close look at a working solar home with a one-of-a-kind tour from an energy efficiency engineer, go through an energy audit with an energy services consultant, and get a special peek at the research and development being conducted at the

University of Maryland's Energy Research Center.

Career Education; Science-Forms of energy; Solar Energy; Energy Conservation; Careers; Energy

Career Day Series

For descriptions see individual titles:

Career Day 1: Alternative Energy [597542]

Case of the Mysterious

Behavior of Some Chemical Elements

027162 VH

PI 12 min 1998 UACJ

Chemistry - Solved By Sherlock Olmos Series - Animated. Sequel to "Case of the Periodic Table of the Elements". Sherlock decides to investigate the suspicious behavior of some of the elements. Focus is on hydrogen, fluorine gas, the noble gases, and the exchange of electrons. Study guide jacket.

Chemistry

The Case of the Mysterious Material

595120 VH

IMJ 60 min 2005 NASA

NASA SciFiles Series - The tree house detectives are baffled when they find an unusual object right beneath their feet. They initiate the NASA SCI Files Crime Scene Investigation Team and enlist the help of NASA to help determine the origin of this foreign object. As they get to the heart of the "matter," they learn that all materials are different and that technology can be a very useful tool.

Materials; Matter

Challenge Series

For descriptions see individual titles:

Matter and Its Properties [022399]

Changes in Properties of Matter

026908 VH, DV

IMJ 23 min CA 2000 Schlessinger Video Productions

Physical Science in Action Series - Closed-captioned. Shows how and why matter changes form by vaporization, evaporation, sublimation, and condensation, the role of energy, and the difference between chemical and physical changes. Hands-on demonstration tests the law of Conservation of Matter. DVD Contains: 1 Disc with English and Spanish language tracks, Discussion questions and activities, Investigative Data Sheet, Chapter select, and both DVD and VHS contain in-case teacher's guide.

Matter

The Changing Phases of Matter

597843 DV, DM

I 14 min 2009 Visual Learning Company

Closed-captioned. Understand how a substance, such as water, can exist in different phases - solid, liquid, and gas. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.

Matter; Liquids; Change of State (Physics); Gases; Solids

Cheering Energy/Walking on Water

593450 VH

IMJ 30 min CA 2003 ESPN-TV

SportsFigure Series - Closed-captioned. Basketball's Kenyon Martin explores sound, energy, and logarithms; Rhoni Barton uses water skiing to demonstrate force vectors, equilibrium, and Newton's laws. Teacher's guide.

Sound; Energy; Newton's Law

Chemical Changes Module

597164 MB

PIM 2008 Millmark Education

ConceptLinks Series - Differentiated, leveled non-fiction books explore the concepts of chemistry at four reading levels (grades 2, 3, 4, 5). Teacher's guide and CDs provide lesson plans, supplemental images, and oral readings of the books. Contains: 24 Student Books, 6 copies of each title (Forming New Substances; Transfer of Energy; Breaking Bonds; and Acids and Bases); 1 Teacher's Guide; 1 Concept Connector (Chemical Changes at a Picnic on one side and Chemical Changes in Arts and Crafts on the reverse side); 1 ConceptLinks Reading Level Chart; 4 Discs (Chemical Changes Image Bank CD ROM, Chemical Changes CD ROM, Chemical Changes Audio CD, and Chemical Changes Classroom Management and Assessment CD ROM); in gray Storage Tote Bag.

Chemical Reactions; Chemical Compounds; Chemistry

Chemical Reactions

592973 DV, DM

I 26 min CA 2003 Disney Educational Productions

Bill Nye the Science Guy Series - Closed-captioned. Have a blast watching the explosive examples Bill Nye uses to explain that everything is made of chemicals. Guest star Candace Cameron shares the lab with Bill and shows that fire is actually a chemical reaction. Includes interactive quizzes, glossary, chapter search with National Science standards and bonus footage. Contains: 1 Disc.

Chemical Reactions; Chemistry

Chemistry

Chemical Reactions

029446 VH
PIMJS 20 min 1987 Merrill
Publishing Company
Mr. Wizard's World Series -
Demonstrations include: homemade
hydrogen; homemade fire
extinguisher; oven cleaner and
aluminum reaction; "burning" sugar;
and cleaning silver.

Chemistry; Chemical Reactions

Chemical Reactions

026104 VH
IMJ 19 min CA 1998 United
Learning
Physical Science Series - Closed-
captioned. Explores the
characteristics of chemical reactions
and also equations, synthesis,
decomposition, replacement reactions,
endothermic and exothermic reactions,
and kinetics. Teacher's guide,
blackline masters.

Chemical Reactions; Chemistry

Chemical Reactions/Phases of Matter

024461 VH
I 52 min 1994 Disney Educational
Productions
Bill Nye the Science Guy Series -
Uses comedy, interviews with
scientists, and hands-on experiments
to illustrate chemical reactions and
changes of state in matter. Teacher's
guide.

Chemistry; Change of State
(Physics); Physics; Chemical
Reactions; Matter

Chemical Tests

029445 VH
PIMJS 20 min 1987 Merrill
Publishing Company
Mr. Wizard's World Series -
Demonstrations include: what makes
a candle burn?; testing for hydrogen;
kitchen chromatography; cabbage
juice indicator; starch iodine test;
iodine clock reaction.

Chemistry

Chemicals

024493 VH
I 25 min CA 2000 Lucerne Media
Wonder Why Series - Closed-
captioned. Shows what happens
when chemicals combine.

Chemical Elements; Chemicals

Chemistry Essentials Series

For descriptions see individual titles:
Atomic Structure: Mapping an
Invisible World [025185]
Compounds: Electromagnetic
Attraction in Molecules [025187]
Mixtures: Together But Separate
[025188]
The Periodic Table: Reactions and
Relationships [025190]

Chemistry in Action

595048 KT, DV, DM
IMJ 80 min CA 2005 Visual
Learning Company
Chemistry in Action Series - Closed-
captioned. Contains four 20 minute
videos with on-screen quizzes.
Explores the basics of chemistry for
middle school students. Kit contains:
4 VHS (Bonding, The Periodic Table,
The Compounds in Chemistry, and
Reactions - 20:00 each); four 30-page
teacher guides, and four sets of
Student Assessment and Activities.
The DVD contains same as kit
(teacher and student guides are on
the DVD) plus video index, labeled
slides, subtitles, and iMovie project on
1 Disc.

Periodic Table of the Elements;
Chemical Reactions; Chemical
Compounds

Chemistry in Action Series

For descriptions see individual titles:
Chemistry in Action [595048]

Chemistry in the Kitchen

029444 VH
PIMJS 20 min 1987 Merrill
Publishing Company
Mr. Wizard's World Series -
Demonstrations include: effect of salt
on ice; how much gas in soda?;
making glue from milk; bleach art;
secret inks; explosive flour; steel wool
"fireworks."

Chemistry

Chemistry Laboratory

597157 DV
JS 15 min 2007 TMW Media Group
Workshop Safety Series - Covers the
working of a laboratory along with
environmental concerns. Includes
protective equipment, housekeeping,
proper techniques, chemicals,
glassware, and more. Contains: 1
Disc and In-case Teacher's guide.

Safety Education; Chemistry -
Laboratory Techniques; Chemistry

Chemistry - Solved By Sherlock Olmos

For descriptions see individual titles:
Case of the Mysterious Behavior of
Some Chemical Elements [027162]
The Mysterious Case of Chemistry
[027164]
The Mysterious Case of the Periodic
Table of Elements [027163]

Chromatography

592734 VH
S 23 min CA 2002 Library Video
Company
Science Lab Investigations Series -
Closed-captioned. Learn the theory
and application of this technique for
the rapid separation of chemical
mixtures. Teacher's guide.

Chemical Compounds; Science -
Experiments

Climate Control: Alternative Energy and Rain Forests

027071 VH
JSI 26 min 1997 Christian Science
Monitor
Environmental Studies Series - Global
warming is being caused by burning of
fossil fuels. While research is making
alternative power cheaper and safer,
rain forests that turn carbon dioxide
into oxygen are being destroyed.
Shows Costa Rica as a model of rain
forest conservation. Teacher's guide.

Environment; Rain Forests; Energy

Coal, Oil, Gas: Gifts of the Gods

591567 VH
S 25 min 2000 Landmark Media
The Prometheus Principle Series -
Scientists and industrial leaders look
at current energy usage and venture
prognoses on the future of coal, oil,
and gas in energy production.

Coal; Energy Resources;
Petroleum; Energy

Color Discovery Tubes Kit

593927 KT
NP 2004 Lakeshore Learning
Materials
Shake the tubes to observe how
primary colors combine to make
secondary colors. Colored liquids
have different weights and separate
automatically. Contains: 3 clear
plastic tubes filled with colored liquid,
1 Teacher's guide.

Color; Liquids

Color in Design

592884 VH
MJ 20 min CA 1998 GPN
Educational Media
Math in the Middle of Design Series -
Closed-captioned. Explores the
mathematical principles of design.
Shows how designs are influenced by
color and how math is involved.
Includes marketing research, color
wheel, and how colors affect energy
consumption. Shows data collecting
experiments. Engineer shares about
using color in urban design. Teacher's
guide.

Color; Energy

Compounds: Electromagnetic Attraction in Molecules

025187 VH
MJS 24 min 1996 Great Pacific
Media
Chemistry Essentials Series -
Animation and graphics are used to
explain how compounds are formed by
either ionic or covalent bonding and
the difference between various groups
of compounds such as acids, bases,
and hydrocarbons. Chemical formulas,
chemical equations, and the
conservation of matter are also
explained. Teacher's guide.

Molecules; Chemical Compounds

Chemistry

ConceptLinks Series

For descriptions see individual titles:
Chemical Changes Module [597164]
Energy Module [597165]
Properties of Matter Module [596747]

Core Chemistry

597815 DV
JSA 32 min CA 2007 Ambrose Video Publishing Inc.
Closed-captioned. Contains an introduction to the study of chemistry. Shows how each branch of chemistry evolved from the basic principals and laws of chemical interactions. Key theories and discoveries are presented in chronological order. Program Segments: 2 million B.C.-1661 - Ancient Chemistry; 1800 - Electrolysis Reveals That Electricity Can Produce a Chemical Reaction; 1808 - Atomic Theory of Matter is Announced; 1828 - Organic Chemistry; 1869 - First Periodic Table; 1945-Present - Catalysts and New Chemicals. Contains: 1 Disc and Teacher's guide folder.

Cricket Science Unit

595664 KT
IMJS 1995 Educational Innovations Inc.
Contains a variety of lessons to help students learn about crickets. Conduct scientific research by counting the number of chirps per minute to variables such as elevation temperature, and seasons. Contains: 1 Wooden Percussion Cricket instrument with stick and instruction sheet; 2 VHS (Chirping Crickets for the Classroom: A Video Adventure on the Life of Crickets - 25:00 and The Chirping Tree Cricket - 4:00); 1 Audio cassette with guide (Myths and Science of Cricket Chirps - 15:00); and 1 How to Use Audio and Video Programs instruction sheet.
Crickets; Scientific Method; Insects

Describing Matter and Its Properties

597844 DV, DM
I 14 min CA 2009 Visual Learning Company
Closed-captioned. Uses everyday examples to illustrate how matter is described and measured. Looks at volume, mass, weight, density, and chemical properties. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.
Matter

Earth Kit

041310 KT
IMJ 1996 Dorling Kindersley Education
Eyewitness Series - Projects contained in this kit let students examine our planet Earth, its position in the solar system and universe, and the implications of human actions that continually transform the Earth's surface. Contents: 4 copies each of VOLCANO AND EARTHQUAKE/by Susanna Van Rose - Photos and text explain the causes and effects of volcanoes and earthquakes and examine specific occurrences throughout history; THE EARTH AND HOW IT WORKS/by Steve Parker - Photos and text explore Earth's beginnings with fossils, landscape, space exploration, and more; WEATHER/by Brian Cosgrove - Photographs and text depict different aspects of weather and how it is forecast; SPACE/by Sue Becklake - Photographs and text explore the wonders of space, space exploration, planets, satellites, and maps; ROCKS AND MINERALS/by Dr. R.F. Symes - Photographs and text examine the creation, importance, erosion, mining, and uses of rocks and minerals; 1 Wall Chart; 1 Project Planner with 16 cards; 1 Help cards packet with 8 Help Cards; 1 Teacher's Book.
Earth; Planets; Climate; Weather; Energy

Electricity and Magnetism - CAT Kit

048007 CK
PIMJ CA 2000
Closed-captioned. A collection of 7 different programs offers an overview of electricity and magnetism. Includes: Electricity; Electricity: A First Look; Electricity and Magnetism: Invisible Forces; Introduction to Circuits (closed-captioned); Introduction to Magnetism (closed-captioned); Magic School Bus Getting Energized (closed-captioned); and Magnets and Electricity.
Energy; Magnetism; Electromagnetism; Electricity

Electricity: The Invisible River of Energy

027203 VH
MJS 23 min 1997 Film Ideas Inc
Essentials of Physics Series - Provides a fundamental understanding of electricity. Covers static and current electricity, circuits, generation, motors, and more. Teacher's guide with questions and answers sheets.
Electricity; Energy

Electromagnetic Energy

593108 VH
IMJ 23 min CA 2000 Library Video Company
Energy in Action Series - Closed-captioned. Explains the source of electromagnetic energy and how these energy waves function. Includes a hands on demonstration and investigation to expand learning. Teacher's guide.
Energy; Waves

Elementary Science Series

For descriptions see individual titles:
The Scientific Method [022955]

Elements, Compounds, and Atoms

026075 VH
IMJ 18 min CA 1998 Northwest Teleproductions
Physical Science Series - Closed-captioned. Covers elements, chemical symbols, compounds, atomic structure, and major historical events. Teacher's guide, Blackline masters.
Chemistry; Atoms

Elements, Compounds, and Mixtures

026906 VH, DV
IMJ 23 min CA 2000 Schlessinger Video Productions
Physical Science in Action Series - Closed-captioned. Examines how substances combine including chemical bonding, heterogeneous and homogeneous mixtures. Hands-on activity shows how ingredients of a mixture can be separated. DVD Contains: 1 Disc with English and Spanish language tracks, Discussion questions and activities, Investigative Data Sheet, Chapter select, and both DVD and VHS contain in-case teacher's guide.
Chemistry; Chemical Compounds

Energy

596048 DV
I 26 min CA 2005 Disney Educational Productions
Bill Nye the Science Guy Series - Closed-captioned. See how to conduct home experiments that transform potential energy into kinetic energy and use falling water to make energy. Includes fully indexed "chapters" correlated to National Science Standards; interactive glossaries and quizzes; bonus footage; and on-disc implementation guides. Contains: 1 Disc.
Energy; Physics

Energy

024496 VH
I 25 min CA 2000 Lucerne Media
Wonder Why Series - Closed-captioned. Explains potential and kinetic energy.
Energy

Chemistry

Energy

024037 VH
PI 10 min 1994 Films for the Humanities

Take a Look 1 Series - Kate uses moving toys to show Jeffrey the basic principles of energy, the different forms it can take, where it can be found.

Energy

Energy and Chemical Reactions

592739 VH
S 23 min CA 2003 Library Video Company

Science Lab Investigations Series - Closed-captioned. Students will explore ways to investigate and explain how chemical reactions release or absorb energy. Teacher's guide.

Science - Experiments; Chemical Reactions; Energy

Energy for Children Series

For descriptions see individual titles:

All About Heat [593132]

All About the Conservation of Energy [593133]

All About the Transfer of Energy [593134]

All About the Uses of Energy [593135]

What is Energy? [593136]

Energy for the Future: The Grand Vision

591566 VH
S 25 min 2000 Landmark Media
The Prometheus Principle Series - For inventors and economists both, the race is on to find the most efficient and sustainable use of resources to produce energy.

Energy; Energy Resources

Energy in Action Series

For descriptions see individual titles:

Electromagnetic Energy [593108]

Energy: Potential and Kinetic [593109]

Energy Resources: Use and Conservation [593110]

Heat and Chemical Energy [593111]

Mechanical Energy [593112]

Nuclear Energy [593113]

The Transfer of Energy [593114]

Energy Module

597165 MB
PIM 2008 Millmark Education

ConceptLinks Series - Differentiated, leveled non-fiction books explore the concept of energy at four reading levels (grades 2, 3, 4, 5). Teacher's guide and CDs provide lesson plans, supplemental images, and oral readings of the books. Contains: 24 Student Books, 6 copies of each title (Sources of Energy, Changing Forms, Many Different Forms, Kinetic Energy and Potential Energy); 1 Teacher's Guide; 1 Concept Connector (Energy on the Farm on one side and Building with Energy on the reverse side); 1 ConceptLinks Reading Level Chart; 4

Discs (Energy Image Bank CD ROM, Energy Resource CD ROM, Energy Audio CD, and Energy Classroom Management and Assessment CD ROM); in gray Storage Tote Bag.

Energy; Physics

Energy: Moving Toys

591928 VH
PIMJ 15 min 1993 New Dimension Media

Forces Series - Energy is transferred to toys when we play with them. Some toys store energy in springs, elastic bands, and batteries. Energy is transferred into movement, heat, light, and sound. Many examples are from 100 years ago. Traces all energy back to the sun. Study guide jacket.

Motion; Energy; Toys; Physics; Force and Energy

Energy: Potential and Kinetic

593109 VH
IMJ 23 min CA 2000 Library Video Company

Energy in Action Series - Closed-captioned. Defines potential and kinetic energy and explores their relationship. Experiments demonstrate the effect of gravity on potential energy and how to measure kinetic energy. Teacher's guide.

Force and Energy; Energy

Energy Resources

041342 KT
PI 1996

Looks at the different types of energy; ways to use energy; and ways to save energy. 5 Hard cover books: FIRST SCIENCE USING ENERGY/by Julian Rowe and Molly Perham - Covers such topics as Pedals and Paddles, Paddleboat Race, Water Power, Wind Power, Windmills, Making Electricity, Light up the Dark, Electric Machines, Batteries and Switches, Static Electricity, Energy From the Sun, and Fossil Fuels. WHAT ABOUT? SERIES of 4 books/by Jacqueline Dineen: ELECTRICITY - The ancient Greeks discovered electricity more than 2,000 years ago. Discusses the contribution of several inventors such as Thomas Edison, Michael Faraday, Benjamin Franklin, and Alessandro Volta; OIL, GAS, AND COAL - Explains that oil, gas, and coal are the remains of living things called fossils. Shows how it was formed, how we harvest the raw material, and make it into energy we use everyday; RENEWABLE ENERGY - The sun, wind, and flowing water are sources of renewable energy that will never run out. Discusses Solar Power, Wind Power, Wind Farm, Water Power, Hydroelectric Power, Tidal Power, and Geothermal Energy Power Plants; and SAVING ENERGY - Investigate the ways we can all conserve energy and the dangers of nuclear power. 1 VHS: Energy - 11:00.

Environment; Energy; Energy Resources; Conservation of Natural Resources; Electricity

Energy Resources: Use and Conservation

593110 VH
IMJ 23 min CA 2000 Library Video Company

Energy in Action Series - Closed-captioned. Explores the sources of energy in nature, how we learned to harness them, and concerns with rising consumption. Demonstrates making a solar-powered oven. Teacher's guide.

Energy; Energy Resources; Energy Conservation

The Energy Savers

020557 VH
PIMJ 9 min 1982 Walt Disney
Presents Donald Duck and Goofy showing effective ways to save energy every day in every room in the house.

Energy; Conservation of Natural Resources; Energy Conservation

Energy Transfer

596319 DV
IMJ 30 min CA 2007 Disney Educational Productions

Bill Nye: The Way Cool Game of Science Series - Closed-captioned. Test student knowledge of the sciences with this interactive game for two teams. Runs on a DVD player or computer with hundreds of standards-based questions for randomized play. Answers generate an explanation from Bill Nye the Science Guy. Has a wide variety of multiple choice questions on energy transfer and transformation including: Chemical Reactions, Computers, Earthquakes, Electricity, Energy, Friction, Heat, Inventing, Inventions, Light and Color, Light and Optics, Pseudoscience, Science of Music, Sound, Static Electricity, Sun, and Waves. Contains: 1 Disc and Teacher's guide.

Games; Energy

Environment Series

For descriptions see individual titles:
The Power Puzzle [023645]

Environmental Studies Series

For descriptions see individual titles:
Climate Control: Alternative Energy and Rain Forests [027071]

Essentials of Physics Series

For descriptions see individual titles:
Electricity: The Invisible River of Energy [027203]
Force and Work: Energy in Action [027204]
Heat and the Changing States of Matter [027201]
Waves: Energy in Motion [027202]

Chemistry

Exploring Energy

597847 DV, DM
I 14 min CA 2008 Visual Learning Company
Closed-captioned. Gives an overview of energy basics. Real life examples differentiate between potential and kinetic energy, demonstrate different forms of energy, and show how energy changes from one form to another. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.
Energy

Exploring Energy

024760 VH
PI 17 min 1995 Colgren Communications
An introduction to the concepts associated with energy in its various forms. Teacher's guide with blackline master.
Energy

Explosions

024497 VH
I 25 min CA 1994 Lucerne Media
Wonder Why Series - Closed-captioned. Investigates various kinds of explosions, ranging from powerful and potentially dangerous ones in dynamite and TNT to small ones like carbonation in soda pop.
Chemical Reactions

Eyewitness Series

For descriptions see individual titles:
Earth Kit [041310]

Fight a Fire, Save the Ozone

IMJS 10 min CA 1994
Scientific American Frontiers Series - Closed-captioned. Halon is the chemical of choice to put out fires in computer rooms, jet engines, and even oil rigs. It also destroys the ozone. Engineers and aviation specialists test various chemicals to find a replacement.
Chemistry; Fire

A First Look Series

For descriptions see individual titles:
Solids, Liquids, and Gases: A First Look [590793]

Floating Density Spheres Set

597574 KT
PIMJS 2002 Educational Innovations Inc.
Model helps students discover the concepts of density and buoyancy by floating 5 small spheres in various sugar or salt solutions. Each sphere floats at a different level. (Solutions not included). Contains: 1 Clear plastic vial with lid; 1 Pipette; 1 Spoon; 6 Marble-sized spheres (2 white opaque, 1 orange opaque, 1 purple opaque, 1 green opaque, 1 colorless transparent); 4 Rods (red transparent, light green translucent, clear transparent, black); 2 Beads (red

transparent, yellow); 1 Green rubber-like disk; and instructions and Experiments folder.

Matter; Buoyancy

The Flow of Matter and Energy in the Living World: Photosynthesis and Cellular Respiration

591177 VH
IMJ 15 min CA 2000 United Learning
Biology: The Science of Life Series - Closed-captioned. Reviews basic concepts of matter, energy, elements, atoms, molecules, and chemical reactions. Then shows how energy flows through the living world via photosynthesis, cellular respiration, and food chains. Teacher's guide with blackline masters.
Food Chains (Ecology); Energy; Photosynthesis

Fluids

I 26 min CA 1999 Disney Educational Productions
Bill Nye the Science Guy Series - Closed-captioned. Uses comedy and experiments to explore the properties of fluids. Teacher's guide in case.
Liquids

Focus on Science Series

For descriptions see individual titles:
Bulbs, Batteries, and Wires (English Version) [022740]

Force and Motion

596317 DV
IMJ 30 min CA 2007 Disney Educational Productions
Bill Nye: The Way Cool Game of Science Series - Closed-captioned. Test student knowledge of the sciences with this interactive game for two teams. Runs on a DVD player or computer with hundreds of standards-based questions for randomized play. Answers generate an explanation from Bill Nye the Science Guy. Has a wide variety of multiple choice questions on force and motion including: Architecture, Balance, Buoyancy, Electricity, Flight, Fluids, Friction, Gravity, Magnetism, Momentum, Motion, Pressure, Simple Machines, Spinning Things, Static Electricity, and Structures. Contains: 1 Disc and Teacher's guide.
Matter; Games

Force and Work: Energy in Action

027204 VH
MJS 23 min 1997 Great Pacific Media
Essentials of Physics Series - Introduces everyday mechanical forces, gravity, electromagnetism, and the concepts of work, pressure and potential, and kinetic energy. Demonstrates these concepts with simple machines. Teacher's guide with questions and answers sheets.
Simple Machines; Force and Energy; Energy; Physics

Forces in Fluids

597853 DV, DM
I 14 min CA 2008 Visual Learning Company
Closed-captioned. Explores the characteristics of fluids including the impact of pressure on fluid, Bernoulli's and Pascal's principles, buoyancy, and density. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.
Buoyancy; Water; Liquids

Forces Series

For descriptions see individual titles:
Energy: Moving Toys [591928]

Galileo: The Challenge of Reason

026785 VH
MJSA 26 min 1969 Learning Corp. of America
Shaping of the Western World Series - Shows the experiments of Galileo, and dramatizes the conflict between his new scientific thinking and the authority of the church. Points out that although Galileo recanted, his views dominated Western thought in succeeding centuries.
Scientific Method; Galileo; Scientists

Glycolysis and Cellular Respiration: The Biology of Energy

596397 DV
JS 27 min 2006 Film Ideas Inc
Basics of Cell Biology Series - Looks in detail at cellular respiration and glycolysis to show how energy is used in organisms. Focuses on the use of glucose to obtain energy. Contains: 1 Disc and Teacher's guide.
Cells; Energy; Adaptation (Biology)

Chemistry

Gravity Check/Perpetual Motion

595636 VH

MJS 30 min CA 2006 ESPN-TV *SportsFigure Series* - Closed-captioned. Dave Mirra demonstrates angular acceleration through biking stunts. Skateboarder Tony Hawk illustrates perpetual motion, energy conservation, and mass.

Energy Conservation; Mass (Physics); Physics; Energy

Heat and Chemical Energy

593111 VH

IMJ 23 min CA 2000 Library Video Company

Energy in Action Series - Closed-captioned. Shows where heat and chemical energy come from at the atomic level. Demonstrates how heat travels and how scientists measure the energy stored in food. Teacher's guide.

Atomic Energy; Heat; Energy

Heat and Energy

594285 VH, DV, DM

I 14 min CA 2004 Visual Learning Company

Closed-captioned. Introduces different forms of energy, including heat energy. Explore how molecular movement is related to temperature and how temperature is measured. VHS has separate Teacher's Guide. DVD Contains: 1 Disc (Includes same material as VHS plus video index, labeled slides, glossary, subtitles, Teacher's guide, and iMovie project).

Energy; Temperature; Heat

Heat and the Changing States of Matter

027201 VH

MJS 23 min 1997 Film Ideas Inc *Essentials of Physics Series* - Explains how thermal energy causes matter to change states, how thermal energy is transferred, and shows real world examples. Teacher's guide with questions and answers sheets.

Heat; Energy; Physics

Heat/Energy

024464 VH

I 52 min 1994 Disney Educational Productions

Bill Nye the Science Guy Series - Uses comedy, interviews with scientists, and hands-on experiments to illustrate the concepts of heat and energy. Teacher's guide.

Physics; Heat; Energy

The History of the Periodic Table

594279 VH

S 23 min CA 2004 Schlessinger Video Productions

The Periodic Table for Students Series - Closed-captioned. Chronicles the historical development of the concept of an "element" from the ideas of Ancient Greece through modern quantum theory. Scientists sought a unifying principle and logical organization to explain the properties of the elements and Mendeleev developed the table. Teacher's guide sheet and Guide to the Elements booklet.

Periodic Table of the Elements

How to Prepare a Science Project

501714 VH

MJ 25 min CA 1998 Colgren Communications

Closed-captioned. Introduces seven steps to creating a successful science fair project. Illustrates the process with work being carried on by actual scientists in the field. Teacher's guide.

Experiments; Scientific Method

Hydroelectric Power: The Eternal Cycle

591570 VH

S 25 min 2000 Landmark Media

The Prometheus Principle Series - Hydroelectric power provides the greatest degree of efficiency with 96% of its potential being converted to electricity - and with no harmful emissions. Even so, this method of energy production is not completely harmless.

Energy Resources; Energy

Introduction to Circuits

025628 VH

IMJ 21 min CA 1998 National Geographic Society

Closed-captioned. Special agents reveal that circuits are energy transfer mechanisms which can take a number of forms, have specific properties, and have many different applications. Teacher's guide.

Energy; Electricity

Investigating Mixtures, Solutions, Elements, and Compounds

597855 DV, DM

I 14 min CA 2009 Visual Learning Company

Closed-captioned. Everyday examples help students understand and differentiate between mixtures, elements, solutions, and compounds. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.

Chemical Elements; Atoms

Lab Safety

592737 VH

S 23 min CA 2003 Library Video Company

Science Lab Investigations Series - Closed-captioned. Introduces students to safety guidelines for designing and conducting scientific investigations. Includes techniques and personal protective equipment. Teacher's guide.

Chemistry - Laboratory Techniques; Science - Experiments; Safety Education

Lab Safety: The Accident at Jefferson High

022068 VH

MJS 19 min 1986 Barr Films

Using light humor, film presents several important lessons on lab safety for chemistry or any kind of lab.

Chemistry - Laboratory Techniques; Safety Education

Learning About Electricity

023998 VH

PI 16 min 1994 AIMS Multimedia

Learning About Electricity Series - Introduces the essential elements that comprise electricity and shows how to harness and use its energy. Demonstrates electromagnetism. Teacher's guide.

Electricity; Electromagnetism; Energy

Learning About Electricity Series

For descriptions see individual titles: Learning About Electricity [023998]

Liquid Discovery Tubes Kit

593928 KT

NP 2004 Lakeshore Learning Materials

Leakproof tubes let children see science concepts in action. Learn about sinking, floating, separation, currents, viscosity. Contains: 4 clear plastic tubes filled with liquid, 1 Teacher's guide.

Liquids; Buoyancy

The Liquid Show

021857 VH

IMJ 25 min 1983 Landmark Films

Konrad, the kitchen robot, shows students the difference between liquids and solids. Using simple experiments that can be reproduced in class and at home, he illustrates the remarkable properties of ordinary liquids.

Solids; Liquids; Matter

Chemistry

Magic School Bus Getting Energized

025604 VH
PI 30 min CA 1997 Scholastic Inc.
Magic School Bus Series - Closed-captioned. When the electricity for the ferris wheel fails, Ms Frizzle's class learns about different kinds of energy as they work to get the ferris wheel moving again.

Electricity; Energy

Magic School Bus Series

For descriptions see individual titles:
Magic School Bus Getting Energized [025604]

Math in the Middle of Design Series

For descriptions see individual titles:
Color in Design [592884]

Matter

596318 DV
IMJ 30 min CA 2007 Disney Educational Productions
Bill Nye: The Way Cool Game of Science Series - Closed-captioned. Test student knowledge of the sciences with this interactive game for two teams. Runs on a DVD player or computer with hundreds of standards-based questions for randomized play. Answers generate an explanation from Bill Nye the Science Guy. Has a wide variety of multiple choice questions on matter including: Architecture, Atoms and Molecules, Buoyancy, Caves, Chemical Reactions, Comets and Meteors, Earthquakes, Fluids, Gravity, Heat, Inventions, Measurement, Moon, Outer Space, Phases of Matter, Rocks and Soil, Storms, and Water Cycle. Contains: 1 Disc and Teacher's guide.

Matter; Games

Matter

025179 VH
IMJ 15 min 1994 Films for the Humanities
Science Alliance Series - The states of matter: solid, liquid, and gas and their various properties, including mass and volume are demonstrated as well as melting, freezing, condensing, and evaporating.

Matter; Change of State (Physics)

Matter and Its Measures

023688 VH
IMJ 18 min 2000 Lucerne Media
Young Scientist Series - Introduces the basic properties of matter. Explores the world of atoms, the building blocks of matter.

Atoms; Matter; Mass (Physics)

Matter and Its Properties

022399 VH
IMJ 14 min 1988 WDCN Nashville
Challenge Series - Introduces the world of physics through demonstrations and experiments.

Matter

Matter in Action

595050 KT, DV, DM
IMJ 80 min CA 2005 Visual Learning Company
Matter in Action Series - Closed-captioned. Introduces the study of matter to middle school students. Kit contains 4 VHS (What is Matter; Solids, Liquids, & Gases; Elements, Mixtures, & Compounds; and Atoms - 20:00 each), four 30-page teacher guides, and four sets of Student Assessment and Activities. The DVD contains same as kit (teacher and student guides are on the DVD) plus video index, labeled slides, subtitles, and iMovie project on 1 Disc.

Atoms; Matter; Solids; Gases; Liquids

Matter in Action Series

For descriptions see individual titles:
Matter in Action [595050]

Matter, Mixtures, Boats (Why They Float)

598297 DV
P 30 min 2008 Chip Taylor Communications
Take a Look at Science Series - Three stand alone segments: MATTER: Kate and Jamie define matter and experiment with solids, liquids, and gas. MIXTURES: Kate shows the difference between two types of mixtures - the suspension and the solution and experiments with them. WHY BOATS FLOAT - Simple backyard experiments show why some objects float and some sink. DVD Contains: 1 Disc.

Matter; Buoyancy; Chemistry

Matter: Solids, Liquids, and Gases

591464 VH
I 18 min 2001 Sunburst Communications
Real World Science II Series - Experiments and examples from everyday life demonstrate the characteristics of solids, liquids, and gases and how they are affected by heat and cold. Teacher's guide with activity sheets.

Solids; Gases; Liquids; Matter

Mechanical Energy

593112 VH
IMJ 23 min CA 2000 Library Video Company
Energy in Action Series - Closed-captioned. Shows how energy can be transferred from one object to another to make something move, and how that energy can be stored. Demonstrates that sound is mechanical energy and shows how simple machines make work easier. Teacher's guide.

Energy; Force and Energy; Simple Machines

Middle School Physical Science Series

For descriptions see individual titles:
Motion, Energy, and Force [591814]
Motion, Energy, and Force [041547]

Minds on Science Series

For descriptions see individual titles:
States of Matter [023446]
Structure of Matter [023445]

Mixtures and Solutions

026105 VH
IMJ 18 min CA 1998 United Learning
Physical Science Series - Closed-captioned. Examines the two classes of matter: mixtures and solutions and how matter is categorized and described. Teacher's guide, blackline masters.

Matter

Mixtures: Together But Separate

025188 VH
MJS 22 min 1996 Great Pacific Media
Chemistry Essentials Series - Explains the difference between mixtures and compounds. Explores solutions and defines concepts such as solvent, solute, electrolyte, saturated solution, supersaturated solution, solubility, and suspensions and colloids, and how mixtures can be separated by filtering, distillation, and settling.

Chemistry; Chemicals

Motion

I 26 min CA 1999 Disney Educational Productions
Bill Nye the Science Guy Series - Closed-captioned. Uses comedy and experiments to explain Newton's Laws of motion and properties of matter. Teacher's guide.

Matter; Newton's Law; Motion

Motion, Energy, and Force

591814 DV
IMJ 80 min CA 2000 Visual Learning Company
Middle School Physical Science Series - Closed-captioned. Defines motion, speed, velocity, acceleration, and momentum for the middle school student. Contains: 4 VHS (Motion - 20:00; Forces & Newton's Laws - 20:00; Simple Machines - 20:00; Energy - 20:00). Contains: 1 Disc and teacher's guides with student masters including labs and internet activities.

Energy; Force and Energy; Motion

Chemistry

Motion, Energy, and Force

041547 KT
IMJ CA 2000 Visual Learning Company
Middle School Physical Science Series - Closed-captioned. Defines motion, speed, velocity, acceleration, and momentum for the middle school student. Contains: 4 VHS (Motion - 20:00; Forces & Newton's Laws - 20:00; Simple Machines - 20:00; Energy - 20:00). Teacher's guides with student masters including labs and internet activities.

Energy; Motion; Force and Energy

Mr. Wizard's World Series

For descriptions see individual titles:
Chemical Reactions [029446]
Chemical Tests [029445]
Chemistry in the Kitchen [029444]

The Mysterious Case of Chemistry

027164 VH
PI 11 min 1998 UACJ
Chemistry - Solved By Sherlock Olmos Series - Animated. Covers the history of chemistry, from the Greeks through the Alchemists to chemistry today. Study guide jacket.

Chemistry

The Mysterious Case of the Periodic Table of Elements

027163 VH
PI 12 min 1998 UACJ
Chemistry - Solved By Sherlock Olmos Series - Animated. A curious child investigates the structure of the periodic table including electrons, valences, and properties of the elements. Study guide jacket.

Chemistry; Periodic Table of the Elements

Nanotechnology: An Introduction

596883 DV
MJS 25 min 2007 Distribution Access
Explains nanotechnology including nanoparticles, units of measurements, the gecko and lotus effects, the use of lasers, and issues raised by nanotechnology. Contains: 1 Disc.

Microscopes and Microscopy;
Chemistry; Physics;
Microorganisms

NASA SciFiles Series

For descriptions see individual titles:
The Case of the Mysterious Material [595120]

Nuclear Energy

593113 VH
IMJ 23 min CA 2000 Library Video Company
Energy in Action Series - Closed-captioned. Shows how huge amounts of energy can be released when the forces that hold the nucleus of an atom together are disturbed. Includes fission and fusion. Demonstration helps explain nuclear chain reactions. Teacher's guide.

Energy; Nuclear Energy

Periodic Table

025850 VH
S 27 min 1998 Access: The Education Station
Simply Science Series - Reviews Mendeleev's periodic table, the nuclear structure of the atom, Bohr's model of the atom, and the modern periodic table. Teacher's guide.

Chemistry; Periodic Table of the Elements

The Periodic Table

026915 VH, DV
IMJ 23 min CA 2000 Schlessinger Video Productions
Physical Science in Action Series - Closed-captioned. Students learn about key information included on the table, and how elements are grouped by properties. A hands-on activity demonstrates that different elements have different chemical properties. DVD Contains: 1 Disc with English and Spanish language tracks, Discussion questions and activities, Investigative Data Sheet, Chapter select, and both DVD and VHS contain in-case teacher's guide.

Chemistry; Periodic Table of the Elements

The Periodic Table for Students Series

For descriptions see individual titles:
Atomic Structure and the Periodic Table [594275]
The History of the Periodic Table [594279]
Properties of Compounds [594277]
Properties of Elements [594280]
Using the Periodic Table [594281]

Periodic Table: Properties of Element Groups

597297 DV
S 17 min 2007 Benchmark Media
Science Key Concepts: Periodic Table Series - Element groups in the periodic table have common properties when moving vertically down a column, but differ when moving horizontally along the rows. Contains: 1 Disc and Teacher's guide folder.

Periodic Table of the Elements

The Periodic Table: Reactions and Relationships

025190 VH
IMJS 25 min 1996 Great Pacific Media
Chemistry Essentials Series - Explains the periodic law and the significance of the rows and columns of the periodic table, and also outlines the physical and chemical qualities of the members of each group of elements. Importance of various groups of elements in industry and nature is shown. Teacher's guide.

Chemistry; Periodic Table of the Elements

Periodic Table: Structures of Atoms

597298 DV
S 18 min 2007 Benchmark Media
Science Key Concepts: Periodic Table Series - The main value of the periodic table is the ability to predict the chemical properties of an element providing a framework to classify, systematize and compare chemical behavior. The table contains 117 elements as of October 2006. Contains: 1 Disc and Teacher's guide folder.

Periodic Table of the Elements

Phases of Matter

596052 DV, DM
I 26 min CA 2003 Disney Educational Productions
Bill Nye the Science Guy Series - Closed-captioned. Bill Nye takes viewers on a tour of a steel mill to help demonstrate that matter exists in three phases...solids, liquids, and gases. Includes fully indexed "chapters" correlated to National Science Standards; interactive glossaries and quizzes; bonus footage; and on-disc implementation guides. Contains: 1 Disc.

Liquids; Gases; Solids; Matter

Phases of Matter

026106 VH
IMJ 19 min CA 1998 United Learning
Physical Science Series - Closed-captioned. Explains the phases of matter: solid, liquid, gas, and plasma and their effect on our world. Water is used as a prime example. Teacher's guide, blackline masters.

Liquids; Gases; Matter; Solids

Physical Science Collection: Primary Series

For descriptions see individual titles:
Properties of Matter - Part 1 [593913]

Physical Science for Children Series

For descriptions see individual titles:
All About Properties of Matter [026889]
All About Solids, Liquids, and Gases [026895]

Chemistry

Physical Science in Action Series

For descriptions see individual titles:
Changes in Properties of Matter [026908]
Elements, Compounds, and Mixtures [026906]
The Periodic Table [026915]
Properties of Matter [026903]

Physical Science Series

For descriptions see individual titles:
Chemical Reactions [026104]
Elements, Compounds, and Atoms [026075]
Mixtures and Solutions [026105]
Phases of Matter [026106]
Properties of Matter [026073]

The Power Puzzle

023645 VH
PI 20 min 1994 Missouri Botanical Gardens
Environment Series - The energy crisis hits home when the electricity goes out on a group of young detectives. Introduces the different types of energy and the concept of energy conservation.
Ecology; Environment; Energy; Conservation of Natural Resources; Elections

Primary Source Science Series

For descriptions see individual titles:
Alternative Energy [590531]

The Prometheus Principle Series

For descriptions see individual titles:
Biomass: The Strategy of Renewability [591569]
Coal, Oil, Gas: Gifts of the Gods [591567]
Energy for the Future: The Grand Vision [591566]
Hydroelectric Power: The Eternal Cycle [591570]

Properties of Compounds

594277 VH
S 23 min CA 2004 Schlessinger Video Productions
The Periodic Table for Students Series - Closed-captioned. Explores ionic and covalent bonds to show how atoms form compounds. Lewis structures describe how easily an element will react and the periodic table can help predict its behavior. Teacher's guide sheet and Guide to the Elements booklet.
Chemical Compounds; Periodic Table of the Elements

Properties of Elements

594280 VH
S 23 min CA 2004 Schlessinger Video Productions
The Periodic Table for Students Series - Closed-captioned. Explores the connection between the atomic structure of an element and its properties. Learn how an element's behavior is related to the valence shell. Identify trends in properties based on an element's location in the periodic table. Teacher's guide sheet and Guide to the Elements booklet.
Periodic Table of the Elements

Properties of Fuels and Gases

595094 DV
IMJ 18 min 2003 Film Ideas Inc
Science Screen Report for Kids Series - Looks at the properties of different gases and questions why some make good fuels and some don't. Contains: 1 Disc and In-case teacher's guide.
Fuel; Gases

Properties of Gases

592738 VH
S 23 min CA 2003 Library Video Company
Science Lab Investigations Series - Closed-captioned. Students are introduced to kinetic molecular theory as they learn about the physical relationships that exist between temperature, pressure, volume, and molarity in gases. Teacher's guide.
Gases; Science - Experiments

Properties of Matter

026073 VH
IMJ 17 min CA 1998 Northwest Teleproductions
Physical Science Series - Closed-captioned. Explores the characteristics and chemical properties of matter, emphasizing concepts of mass, weight, volume, and density. Teacher's guide, Blackline masters.
Matter

Properties of Matter

026903 VH, DV
IMJ 23 min CA 2000 Schlessinger Video Productions
Physical Science in Action Series - Closed-captioned. Students will learn about physical properties of mass, weight, volume, and density as well as the four phases of matter...solid, liquid, gas, and plasma. Introduces chemical properties observed as one substance changes to another. Hands-on activity demonstrates density by creating a psychedelic lamp. DVD Contains: 1 Disc with English and Spanish language tracks, Discussion questions and activities, Investigative Data Sheet, Chapter select, and both DVD and VHS contain in-case teacher's guide.
Matter

Properties of Matter Module

596747 MB
PIM 2008 Millmark Education
ConceptLinks Series - Differentiated, leveled non-fiction books explore properties of matter at four reading levels (grades 2, 3, 4, and 5). Teacher's guide and CDs provide lesson plans, supplemental images, and oral readings of the books. Contains: 24 Student Books, 6 copies of each title (Properties of Matter Describing and Measuring Matter; Properties of Matter Atoms, Elements, and Compounds; Properties of Matter Physical and Chemical Changes; and Properties of Matter Chemical Reactions); 1 Teacher's Guide; 1 Concept Connector (Cooking With Matter on one side and Matter at the Fair on Reverse); 1 ConceptLinks Reading Level Chart; 3 Discs (Properties of Matter Image Bank - CD ROM, Properties of Matter Resource - CD ROM, and Properties of Matter Audio CD), in gray Storage Tote Bag.
Matter

Properties of Matter - Part 1

593913 VH, DV, DM
P 20 min CA 2003 100% Educational Video
Physical Science Collection: Primary Series - Closed-captioned. Our entire world is made of matter, including things we don't see, like the air we breathe. We learn to use our five senses to identify the properties of an object...size, weight, shape, color, and temperature. Students identify some of the tools used to measure the properties of matter. Finally, we learn that matter has mass and takes up space and that it can exist in different states...solids, liquids, or gases. Teacher's guide jacket (VHS). DVD contains: 1 Disc with chapter divisions and teacher's guide on Disc.
Matter

Radioactivity

591539 VH
S 15 min 2001 Benchmark Media
Science Key Concepts Series: Chemistry - Explores three concepts of radioactivity - detection and origin, types and properties, and measuring and using half life. Illustrated with computer animation and experiments. Teacher's guide.
Radiation

Reaction Equations

025836 VH
S 27 min 1998 Access: The Education Station
Simply Science Series - Discusses formation and decomposition reactions and investigates compounds and equations. Teacher's guide.
Chemistry

Chemistry

Reactions and Energy Changes

591548 VH
S 16 min 2001 Benchmark Media
Science Key Concepts Series: Chemistry - Explores three concepts - exothermic and endothermic reactions, reaction rates, and catalysts. Illustrates them with computer animation and experiments. Teacher's guide.

Chemical Reactions

Reading Rainbow Series

For descriptions see individual titles:
Archibald Frisby [024386]

Real World Science II Series

For descriptions see individual titles:
Matter: Solids, Liquids, and Gases [591464]
Scientific Method [591466]

Regents Review 2009:

Chemistry

060431 VH, PB
JS 90 min 2009 WCNY Public Television
Review of Chemistry regents.
Tests and Testing; Chemistry

Rock On: 5th Grade Science

595381 DV
IM 86 min 2005 Library Video Company
Contains 7 music videos specifically designed to teach fifth grade Science concepts using this brain-research driven tool. Covers the solar system, weather, water cycle, matter, photosynthesis, anatomy, and life science. Contains: 1 Disc and lyric sheet.

Photosynthesis; Matter; Weather;
Water Cycle; Anatomy, Human;
Solar System

Science Alliance Series

For descriptions see individual titles:
Matter [025179]

Science as Inquiry for Children

593337 VH
P 23 min CA 2000 Library Video Company
Closed-captioned. Two students are trapped in a science classroom and must use the principles of scientific investigation to help them escape. They use observations to build knowledgeable explanations for the questions they pose. Teacher's guide.

Scientific Method

Science as Inquiry in Action

593336 VH
IMJ 23 min CA 2000 Library Video Company
Closed-captioned. Attempting to create the ultimate science project, a frustrated student receives assistance from famous scientific thinkers in history. They show him the path of scientific inquiry - guided by knowledge, observations, ideas, and questions - combining scientific reasoning with critical thinking in pursuit of scientific discovery. Teacher's guide.

Scientific Method

The Science in Cosmetics

596859 DV
MJS 28 min 2006 Video Education America
Shows how cosmetics are made and how they have been used for thousands of years. Bases, emulsions, distillation, bulking agents, and preservation illustrate everyday science in action. Contains: 1 Disc and Teacher's guide.

Cosmetology; Chemistry

Science Key Concepts: Periodic Table Series

For descriptions see individual titles:
Periodic Table: Properties of Element Groups [597297]
Periodic Table: Structures of Atoms [597298]

Science Key Concepts Series: Chemistry

For descriptions see individual titles:
Applied Chemistry [591550]
Radioactivity [591539]
Reactions and Energy Changes [591548]

Science Lab Investigations Series

For descriptions see individual titles:
Chromatography [592734]
Energy and Chemical Reactions [592739]
Lab Safety [592737]
Properties of Gases [592738]
Titration [592736]
Water Analysis [592733]

Science Lab Safety

026558 VH
MJS 18 min 1998 Cambridge Educational
Begins with preparations necessary before entering a science lab, using safety equipment performing experiments safely, the importance of staying alert and proper clean-up.

Safety; Safety Education;
Chemistry - Laboratory Techniques

Science Screen Report for Kids Series

For descriptions see individual titles:
Properties of Fuels and Gases [595094]

Science Skills

025828 VH
S 27 min 1998 Access: The Education Station
Simply Science Series - Emphasises the importance of practicing proper procedures when conducting a scientific investigation. Reviews lab skills from previous programs. Teacher's guide.

Chemistry - Laboratory Techniques;
Scientific Method

Scientific American Frontiers Series

For descriptions see individual titles:
Fight a Fire, Save the Ozone [590620]
Spring Man [590621]
Sunrayce '93 [590613]

Scientific Inquiry: Steps, Skills, and Action

594698 VH
MJS 23 min 2003 Human Relations Media
Explores the steps and skills necessary for scientific inquiry.
Scientific Method

Scientific Method

597861 DV, DM
I 14 min CA 2008 Visual Learning Company
Closed-captioned. Introduces students to the scientific method, which scientists use to solve problems and answer questions they have about the world. Real life examples are used to illustrate each step in the scientific method. Contains: 1 Disc with on-screen questions, vocabulary, 5-question quiz, iMovie project; and Teacher's guide folder with blackline masters.

Scientific Method

Scientific Method

591466 VH
I 18 min 2001 Sunburst Communications
Real World Science II Series - Demonstrates how the scientific method can help answer everyday questions. Delineates the six steps. Teacher's guide with activity sheets.

Scientific Method

The Scientific Method

022955 VH
I 20 min 1993 National Geographic Society
Elementary Science Series - Shows work by a chemist, a biologist, and a geologist to demonstrate how the scientific method...observation, hypothesis, experimentation, and conclusion...helps scientists organize and define their research.

Scientific Method

Chemistry

Scientific Method - Understanding Scientific Reasoning

026568 VH
MJS 23 min 1999 Cambridge Educational
Examines this basic system of reasoning which can be used to solve almost any problem. Teacher's guide.
Scientific Method; Critical Thinking

Scientific Processes

595047 KT, DV, DM
IMJ 80 min CA 2005 Visual Learning Company
Scientific Processes Series - Closed-captioned. Prepares middle school students to begin the study of Science. Kit contains: 4 VHS (Safety in Science, Measuring in Science, Your Science Fair Project, and Observations and Data -20:00 each); four 30-page teacher's guides; and four sets of Student Assessment and Activities. The DVD contains same as kit (teacher and student guides are on the DVD) plus video index, labeled slides, subtitles, and iMovie project on 1 Disc.

Science - Experiments; Safety Education; Scientific Method

Scientific Processes Series

For descriptions see individual titles:
Scientific Processes [595047]

Shakhashiri Chemical Demonstrations

597575 DV
MJS 135 min 2008 Educational Innovations Inc.
Chemistry educator Bassam Shakhashiri demonstrates 49 of the most well known chemical demonstrations. Includes Beckers Multiple Ammonia Fountain, The Mercury (II) Orange Tornado, Diffusion of Poisonous Bromine Vapor, The 72 Mouse Trap Simulation of a Nuclear Chain Reaction, and many more. Contains: 1 Disc and Instructor's Guide with references and sample questions (90 p.)

Chemistry - Laboratory Techniques; Science - Experiments; Chemical Reactions

Shaping of the Western World Series

For descriptions see individual titles:
Galileo: The Challenge of Reason [026785]

Simply Science Series

For descriptions see individual titles:
Periodic Table [025850]
Reaction Equations [025836]
Science Skills [025828]

Solids, Liquids, and Gases: A First Look

590793 VH
P 18 min 2001 Rainbow Educational Video
A First Look Series - Explains that matter takes up space, has weight and can change state. Solids keep their shape, liquids and gasses don't. Teacher's guide and blackline masters.
Liquids; Solids; Matter; Gases; Change of State (Physics)

SportsFigure Series

For descriptions see individual titles:
Cheering Energy/Walking on Water [593450]
Gravity Check/Perpetual Motion [595636]

Spring Man

IMJS 13 min CA 1994
Scientific American Frontiers Series - Closed-captioned. By storing potential energy in springs and making muscle power more effective, Hugh Herr's sneakers could revolutionize many sports.

Technology; Energy

Springs

593248 VH
I 13 min CA 2002 Library Video Company
The Way Things Work Series - Closed-captioned. Animated. Based on the book by David Macauley. Mammoth Islanders learn about springs - mechanical devices that transfer stored energy into energy of motion. Teacher's guide.

Energy; Simple Machines

States of Matter

023446 VH
IMJ 19 min CA 1991 Agency for Instructional Technology
Minds on Science Series - Closed-captioned. This series emphasizes the interconnection of science with other disciplines. In each program, an everyday event gives rise to a question. Students use scientific method to solve the problem. Dry ice, being used for special effects during a school play, disappears from a cooler. This program explains factors that bring about a change in state of matter.

Change of State (Physics); Matter

Steam Power

593249 VH
I 13 min CA 2002 Library Video Company
The Way Things Work Series - Closed-captioned. Animated. Based on the book by David Macauley. After observing the power of expanding steam in a tea kettle, the Mammoth Islanders decide to create a steam engine that converts heat energy to mechanical energy. Teacher's guide.

Engines; Power Resources; Energy

Structure of Matter

023445 VH
IMJ 19 min CA 1992 Agency for Instructional Technology
Minds on Science Series - Closed-captioned. This series emphasizes the interconnection of science with other disciplines. In each program an everyday event gives rise to a question. Students use scientific method to solve the problem. This program characterizes the way that atoms form molecules to create matter, after students selling lemonade are puzzled when they find sugary syrup in the pitcher.

Atoms; Matter; Change of State (Physics)

Sunrayce '93

MJS 17 min 1993
Scientific American Frontiers Series - College students harnessed the sun's energy to compete in Sunrayce '93. Student engineers and scientists from 34 colleges and universities designed and built solar-powered cars, then raced them from Texas to Minnesota.
Automobiles; Solar Energy; Energy; Technology

Take a Look 1 Series

For descriptions see individual titles:
Energy [024037]

Take a Look at Science Series

For descriptions see individual titles:
Matter, Mixtures, Boats (Why They Float) [598297]

Thinking Like a Scientist: Scientific Method #1

597079 DV
P 17 min 2007 100% Educational Video
An introduction to the scientific method, explaining scientific terms and illustrating with real world activities. Contains: 1 Disc and Teacher's guide jacket.
Scientific Method

Titration

592736 VH
S 23 min CA 2002 Library Video Company
Science Lab Investigations Series - Closed-captioned. Allows students to apply scientific concepts to discover what a titration is, how it is performed, how to determine when it is complete, and how the technique is applied in a number of real world settings. Teacher's guide.
Science - Experiments; Chemical Reactions

Chemistry

The Transfer of Energy

593114 VH
IMJ 23 min CA 2000 Library Video Company

Energy in Action Series - Closed-captioned. Shows how energy is never lost, but just changes form. Energy transfers enable life to exist on earth. Experiments demonstrate these transfers in action. Teacher's guide.

Energy

Understanding Fuel Systems

022414 VH
SJ 18 min 2000 Pennzoil Products Company

Covers carburetors and fuel injection...what they do, how they work, and some tips on keeping them operating efficiently.

Energy; Fuel; Engines

Using the Periodic Table

594281 VH
S 23 min CA 2004 Schlessinger Video Productions

The Periodic Table for Students Series - Closed-captioned. Shows how the elements are arranged and reveals underlying patterns. Lab footage allows viewers to see chemistry in action. Teacher's guide sheet and Guide to the Elements booklet.

Periodic Table of the Elements

Water Analysis

592733 VH
S 23 min CA 2002 Library Video Company

Science Lab Investigations Series - Closed-captioned. Looks at how and why scientists test and compare water sources for eight factors that include temperature, PH, dissolved oxygen, and hardness. Teacher's guide.

Science - Experiments; Water

Water as a Solvent

590231 VH
IJS 10 min 1999 New Dimension Media

Water's Properties and Uses Series - Most substances can be dissolved by water. Explores the water cycle of dissolving and reversion to pure water in a series of experiments. Study guide jacket.

Chemistry; Water

Water You Up To?

025570 VH
PI 20 min 1987 Media Inc

Professor Einzeit, just returning from the Sahara Desert, wants nothing more than a glass of water. Instead, he learns about water pressure, the water cycle, surface tension, the three states of matter, and dehydration before his assistant saves the day. Teacher's guide.

Matter; Water; Water Cycle

Water's Properties and Uses Series

For descriptions see individual titles:
Water as a Solvent [590231]

Waves: Energy in Motion

027202 VH
JS 23 min 1997 Film Ideas Inc

Essentials of Physics Series - Demonstrates how waves transfer energy, not matter, from one point to another. Covers concepts of reflection, refraction, interference, diffraction, wavelength, amplitude, frequency, and more. Teacher's guide with questions and answers sheets.

Energy; Physics; Waves

Waves/Wind

024458 VH
I 52 min 1994 Disney Educational Productions

Bill Nye the Science Guy Series - Uses comedy, interviews with scientists, and hands-on experiments to look at the interconnectedness of waves and wind. Teacher's guide.

Meteorology; Wind; Energy; Waves

The Way Things Work Series

For descriptions see individual titles:
Springs [593248]
Steam Power [593249]

Weather Classroom Series

For descriptions see individual titles:
Winter Weather [592097]

What is Energy?

593136 VH
P 23 min CA 2000 Library Video Company

Energy for Children Series - Closed-captioned. Demonstrates what energy is and how we use it. Introduces several forms of energy including chemical, mechanical, and nuclear. Activities demonstrate ways to put energy to work. Teacher's guide.

Energy

Winter Weather

592097 VH, OF
IMJS 30 min CA 2002 Weather Classroom

Weather Classroom Series - Closed-captioned. Studying the colder months of the year to cover the basics of winter storms, this episode examines lake-effect snow, freezing points, sleet, freezing rain, snow, and ice.

Earth Science; Chemistry; Nature Study

Wonder Why Series

For descriptions see individual titles:
Chemicals [024493]
Energy [024496]
Explosions [024497]

Workshop Safety Series

For descriptions see individual titles:
Chemistry Laboratory [597157]

Young Scientist Series

For descriptions see individual titles:
Matter and Its Measures [023688]

Zack's Alligator Science Kit

594967 KT
PI 2004 Steve Spangler Science

Zack soaks his alligator key chain in water. Try the experiment using the superabsorbant polymer model in the kit. Watch it grow in COOL water over several days, then watch it shrink as it dries. Contains 2 Books/by Shirley Mazelle: ZACK'S ALLIGATOR - When Bridget the alligator arrives in the mail, she's only the size of a key chain! But after Zack soaks her in water, she grows into a real live alligator. ZACK'S ALLIGATOR GOES TO SCHOOL - Bridget, the sassy gator from the Glades, returns for more high-energy fun in this sequel to Zack's Alligator. Zack takes Bridget to school for show-and-tell, where she sings, skateboards, and generally turns the classroom upside down; 1 Polymer alligator; 1 Teacher's guide; 2 Ziploc bags. IMPORTANT NOTE: Please dry the alligator as much as possible before returning. Place books and teacher's guide in 1 plastic bag and the alligator in a separate plastic bag.

Alligators; Chemical Reactions; Mozelle, Shirley