



Supplemental Second Grade Science Resources

Materials include DVDs, videos, models, etc.

AIR AND WEATHER

#1 Exploring Air

3-2-1 Contact: Air Is Matter - Air Is There

551.6 THR

1 VHS videocassette 15 minutes, 1 ditto, 1 teachers guide. Grade Level: 2 - 6
Examines air mass and matter.

Reading Rainbow: Hot-Air Henry

F REA

1 VHS videocassette 30 minutes, 2 hardback books, 1 teachers guide. Grade Level: K - 5
After William Windom reads this tale of a cat and his hot-air balloon adventure, LeVar attends a national balloon event in South Carolina. He then provides a comical look into the past at some flying machines that didn't. Book titles: Just Us Women; Hot-Air Henry.

Watch 'em Work: Fun in Flight

307 WAT

1 VHS videocassette 30 minutes
Looks at the world of flight, including birds and butterflies, jet planes, kites, helicopters, ultra lites, sky diving, and hot air balloons.

#2 Observing Weather

Hands on Science Library: Air and Weather

551.6 HAN

Collection of 18 books to enhance the Air and Weather kit.

Alphabet of Weather

411 ALP

1 VHS videocassette, 10 minutes
These letters of the alphabet will make you dry or make you wet. You'll see the clouds and watch them grow. You'll feel the wind and hear it blow. You'll see the sky, it might be blue, or dark with clouds as storms move through. The sun may shine, or it may not, you may be cold, you may be hot. So from these letters, all together, here comes an alphabet of weather.

Cloud Formations

551.6 CLO

6 study prints, Titles: Clouds of Vertical Development Parts I and II; Middle Clouds; Special Cloud Forms; Low Clouds; High Clouds.

Eyewitness Weather

551.6 EYE

1 VHS videocassette 35 minutes
Examines variables that make weather a wild card to predict.

The Magic School Bus: Kicks up a Storm

551.6 MAG

1 VHS videocassette 30 minutes
The bus transforms into a Weathermobile and takes the class on a ride through the skies.

Reading Rainbow: Bringing the Rain to Kapiti Plain

F REA

1 VHS videocassette 30 minutes, 3 hardback books, 1 teachers guide. Grade Level: K - 5
Inspired by a tale from the Nandi people of Kenya, narrated by James Earl Jones, LeVar plans a day around rainy weather, including an aerial chase of a thunderstorm and puddle-hopping. Book titles Peter Spier's Rain; Cloud Book; Bringing the Rain to Kapiti Plain.

Familiar Cloud Forms

551.6 FAM

8 study prints, Titles: Cumulus (Fair weather); Cumulus (Towering); Cumulonimbus; Altocumulus; Cirrus; Cirrostratus; Fog; Stratocumulus.

Send in the Clouds

551.57 SEN

1 VHS videocassette, 18 minutes
This video explains the different types of clouds you see in the sky, how clouds are formed, what clouds have to do with weather, and how to predict weather using the jet plane contrails seen in the sky. In this fast-paced, fun-filled video, children explore many different facets of clouds through one kid's adventure.

All About Rain, Snow, Sleet and Hail

551.5 ALL

1 VHS videocassette 23 minutes + 1 teacher's guide
Examines precipitation, its forms and what creates it.

#3 Wind Explorations

Reading Rainbow: Come a Tide

F REA

1 VHS videocassette 30 minutes, 3 hardback books, 1 teachers guide. Grade Level: K - 5
Book by George Ella Lyon, read by Dixie Carter, tells the story of one quirky family's adventure during a spring flood. LeVar takes a look at dramatic weather - from blizzards to tornadoes, and everything in between. A news reporter gives an eyewitness account of Hurricane Hugo and the courageous people who weathered the storm. Book titles: Tornado Alert; Storms; Come a Tide.

Wind and What it Does (Revised)

551.6 WIN

1 VHS videocassette 10 minutes
Examines wind as moving air; how heat makes wind; and the importance of wind in predicting the weather

All About Wind and Clouds

551.5 ALL

1 VHS videocassette 23 minutes + 1 teacher's guide

Looks at the great variety of clouds and the effect of the wind

#4 Looking for Change

All About Climate and Seasons

551.5 ALL

1 VHS videocassette 23 minute + 1 teacher's guide

Examines what causes the seasons to change and what changes in weather they bring with them.

All About Meteorology

51.5 ALL

1 VHS videocassette 23 minutes + 1 teacher's guide

Examines the science of meteorology and the prediction of weather.

IDEAS AND INVENTIONS

Leaf Venation

581 LEA

1 leaf model. Grade Level: K - 12

Exhibits six common leaves of different venation. Includes a leaf skeleton. Labeled.

Look What I Found: Making Codes and Solving Mysteries

500 LOO

1 VHS videocassette 45 minutes.

Demonstrates science projects that use simple materials and tools. Projects: fingerprints, tin can telephones, periscopes, and codes. Includes related book lists and activities.

Mr. Wizard's World: Chemical Tests

540 MRW

1 VHS videocassette 26 minutes, 1 ditto, 1 teachers guide.

Activity segments: What Makes a Candle Burn?; Testing for Hydrogen; Kitchen Chromatography; Cabbage Juice Indicator; Starch Iodine Test; Iodine Clock Reaction. Recommended: Kitchen Chromatography, Cabbage Juice Indicator.

Riddle of Wizard's Oak: Symmetry

510 RID

1 VHS videocassette 15 minutes, 1 teachers guide.

Students solve geometry riddles by examining lines, reflectional and rotational symmetry as found in nature and mirrors.

Inventions Extensions

Gizmo

608 GIZ

1 VHS videocassette (76 minutes)

A tribute to unusual inventions and inventors. Includes original footage from early 1900's to the present.

Reading Rainbow: Alistair's Time Machine

F REA

1 VHS videocassette 30 minutes, 4 hardback books, 1 teachers guide.

Story about a boy who builds his own time machine. Meet a wacky woman inventor from the Stone Age, Thomas Edison, and a clever machine from the future that has its own surprises for LeVar. Students look at amusing inventions from the past that never quite made it into today's lifestyle.

Book title: Alistair's Time Machine; What Does it Do?; Many Lives of Benjamin Franklin; Find Waldo Now.

Reading Rainbow: Galimoto

E REA

1 VHS videocassette 30 minutes, 3 hardback books, 2 teachers guides

Story of a young African boy who uses his wits to search for scraps of wire to make his own galimoto. Explores the many practical uses of wire in our everyday world.

Book titles: Galimoto; Little Pigs' Puppet Book; My First Activity Book.

INSECTS

Butterflies

Hands-On Science Library: Butterflies

595 HAN

5 hardback books. Examines the structure, behavior and habitats of butterflies. Includes directions for raising butterflies.

Butterflies

595.78 BUT

1 videocassette, 15 minutes

Colorful close-up and time-lapse photography teaches students about these fascinating insects. After distinguishing butterflies from moths, it explores the life-cycle of the zebra longwing butterfly, from egg, to larvae, to pupa, to the emergence of the adult through the process of metamorphosis. Finally it examines parts of the butterfly's anatomy and discusses their specific uses.

Butterfly Resource Kit

595 BUT

1 VHS videocassette 58 minutes (with pamphlet and ID key), 2 paperback books, 3 hardback books, 3 teachers guides.

Collection of materials examining butterflies, moths, and their life cycles. Includes activities. Video title: Attracting Butterflies of Your Backyard.

Butterflies of the United States

595 BUT

1 model. Collection of 20 specimens native to the U.S., each labeled with both their common and scientific names.

Butterfly and Moth

595 BUT

8 study prints. Examines the life cycles of the Monarch Butterfly and the Polyphemus Moth.

Butterfly Posters

595 BUT

3 study prints. Depicts the life cycle of the Swallowtail butterfly, a portrait of the Painted Lady butterfly, and a variety of other butterflies along with their scientific names.

Moths and Butterflies Group 1

595 MOT

8 study prints. Titles: Tiger Swallowtail Butterfly; Buckeye Butterfly; Fritillary Butterfly; Viceroy Butterfly; Cloudless Sulphur Butterfly; Cecropia Moth; Polyphemus Moth; Prometheus Moth.

Bug City: Butterflies and Moths

595 BUG

1 VHS videocassette 23 minutes + 1 teachers guide.

Explores the life cycles, behaviors, migrations, and habitats of butterflies and moths. Shows how to tell them apart. Closed Captioned.

Other Insects (and insects in general)

Bill Nye the Science Guy: Insects

595.7 BIL

1 DVD, 26 minutes

Discusses the parts of an insect's body, metamorphosis, and the life cycle of insects. Shows a visit to an insectarium and kids digging for insect fossils.

Bug City: Beetles

595 BUG

1 VHS videocassette 23 minutes + 1 teachers guide.

Examines the role of beetles in nature as recycling agents. Shows how to make a beetle habitat for observation.

Bug City: Aquatic Insects

595 BUG

1 VHS videocassette 23 minutes + 1 teachers guide.

Examines dragonflies, water-striders, damselflies, backswimmers, and more that have adapted to life in the world of water. Shows how to make an aqua-scope for water observations.

Bug City: House and Backyard Insects

595 BUG

1 VHS videocassette 23 minutes + 1 teachers guide. Grade Level: 1 - 5

Examines life cycles, habits, behaviors, and classifications of insects found in our homes and yards. Discusses characteristics of spiders, fleas, mites, termites, cockroaches, snails, slugs, earthworms, bees, moths, aphids, and more, and how they affect humans. Includes techniques used to collect small insects for study.

Insects

595 INS

1 VHS videocassette 12 minutes.

Introduction to insects, including shelters, food habits, and ways that insects are helpful and harmful to humans.

Reading Rainbow: Bugs

595 REA

1 VHS videocassette 30 minutes, 3 hardback books + 2 teachers guides.

Examines ants, crickets, flies, centipedes and lady beetles; where insects live, what they are good for, how they grow. LeVar visits Insect World at the Cincinnati Zoo for an in-depth look at more fascinating insects. Also an added highlight of the monarch butterflies migration to Sierra Cinqui Mountains in Mexico. Book titles: Ant Cities; Ladybug; Bugs.

Aquatic Insects Biorama

595 AQU

1 insect model, 1 teachers guide.

Ecosystem of 17 typical adult and larvae aquatic insects shown in their natural habitat.

Common Insects (Group I)

595 COM

8 study prints. Titles: Monarch Butterfly; Red-Legged Grasshopper; Cicada; Dragonfly; Ant; Housefly; Honeybee; Mosquito.

Eyewitness: Insects

595 EYE

4 hardback books, 16 paperback books, 10 magazines, 1 poster, 8 help cards, 12 project planner cards, 1 teachers guide.

Explores a variety of insects, and how to collect, observe, and identify them. Book titles: Picturepedia: Insects and Spiders; Amazing Beetles; Amazing Butterflies & Moths; Amazing Insects; Amazing Spiders.

Hands-On Science Library: Insects

595 HAN

Collection of books: 11 hardback books, 2 paperback books.

Insect Orders: Arthropods Biorama

595 INS

1 insect model. Collection of 40 insects representing 18 different orders. Each identified with common and scientific names.

Insect Orders Biorama

595 INS

1 insect model. Collection of large insects, representing 12 orders. Each identified with common and scientific names.

Insects Collection Models

595 INS

11 models. Titles: Insects Collection; Tick; Tarantula; Bee; Cricket; Orthoptera Collection; Garden Spider; Dragonfly; Termite Set; Anthropol Collection; Household Pests.

Insects Library

595 INS

1 VHS videocassette 60 minutes, 3 paperback books.
Explores the insect world and how to collect and identify.

Insects of Garden and Cropland

595 INS

8 study prints. Titles: Ladybird Beetle; Cotton Boll Weevil; Spotted Cucumber Beetle; Aphid; Asparagus Beetle; Corn Earworm; Squash Vine Borer; Colorado Potato Beetle.

Insects of Home and Neighborhood

595 INS

8 study prints. Titles: Termite; Lack Vine Weevil; Cockroach; Cynthia Moth; Mealworm and Darkling Beetle; Japanese Beetle; Fruit Fly; Elm

The Magic School Bus gets Ants in its Pants.

595.79 MAG

1 videocassette, 30 minutes.

Ms. Frizzle takes the class inside an anthill to observe their social structure and how they work together.

The Magic School Bus: Bugs, Bugs, Bugs!

595.79 MAG

DVD, 30 minutes

Ms. Frizzle and her class investigate the lives of insects such as ants, caterpillars, and bees.

Reading Rainbow: Life Cycle of the Honeybee

595 REA

1 VHS videocassette (30 minutes), 3 hardback books, 10 paperback books, 2 teachers guides, Book titles: Lady and the Spider; Going Buggy!; Reasons For a Flower; and Life Cycle of the Honeybee.

Visit a real-life beekeeper and examine a bee hive close-up. Viewers will learn how honey is extracted from combs and how important the queen bee is to a well-organized hive.

Reading Rainbow: Bugs

595 REA

1 VHS videocassette (30 minutes), 3 hardback books, 2 teachers

Note: Copy 1 includes books and Copy 2 does not include books.

Book titles: Ant Cities; Ladybug; Bugs.

Examines ants, crickets, flies, centipedes and lady beetles; where insects live, what they are good for, how they grow. LeVar visits Insect World at the Cincinnati Zoo for an in-depth look at more fascinating insects. Also an added highlight of monarch butterflies migration to Sierra Cinqui Mountains in Mexico.

Household Pests Biorama

595 HOU

1 insect model. Collection of 22 of the most common household pests. Each identified with common and scientific name.

Bug City: Crickets, Grasshoppers and Friends

595 BUG

1 VHS videocassette 23 minutes, 1 teachers guide.

Examines the jumping, chirping, and camouflaging skills of crickets, grasshoppers, katydids, praying mantis, and the walking stick. Shows how to make a cricket habitat and take care of them. Closed Captioned.

HAND POLLINATORS

Bug City: Bees

595 BUG

1 VHS videocassette, 23 minutes

From queen bee to worker bee, this program shows exactly why bees are so important.

What is Pollination? (A Sticky Question)

582 WHA

1 VHS videocassette, 16 minutes + teachers guide

This video teaches the fundamentals of pollination. Key concept: pollination and pollinators.

Bill Nye the Science Guy: Flowers

575.6 BIL

1 DVD, 26 minutes.

Explores how flowers make seeds, play a key role in pollination and help plants reproduce.

All about Plant Pollination: Fruits, Flowers and Seeds

581 ALL

1 VHS videocassette, 24 minutes + teachers guide

An introduction to the processes of pollinations and reproduction in plants.

SOLIDS AND LIQUIDS

Water and What it Does (Second Edition)

551.4 WAT

1 VHS videocassette 12 minutes. Grade Level: 2 - 4

Explores water as a solid, liquid or a gas; meanings of evaporation, condensation, expansion, contraction, and dissolution.

All About Solids, Liquids, and Gases

530.4 ALL

1 DVD, 23 minutes + 1 teachers guide

Introduction to the three states of matter.

Bill Nye the Science Guy: Phases of Matter
530 Bil

1 DVD, 26 minutes.

A tour of a steel mill demonstrates that matter exists in three phases: solids, liquids, gases.