

2011-12

Teacher's Guide to Virginia Living Museum Pre-K - 12 School Science Programs

The Mid-Atlantic region's premier Science Education facility



VLM School Science Programs are

- **SOL-correlated**
- **Grade-level targeted**
- **Taught by the Museum's professional science educators**
- **Endorsed by the**

VA Dept. of Education

U.S. Dept. of Education

National Science Foundation

Students of all ages see, touch and experience science like never before at the Mid-Atlantic region's premier Science Education facility.

The Virginia Living Museum is a private non-profit natural history museum and environmental education center dedicated to connecting people to nature through educational experiences that promote conservation.

The Museum is accredited by the American Association of Museums and the Association of Zoos and Aquariums. It is a member of the Association of Science and Technology Centers, the Chesapeake Bay Gateways Network and the Eastern Virginia Birding and Wildlife Trail.

The Virginia Living Museum's exhibits correlate with and reinforce Virginia's Standards of Learning for Science.

While taking a tour of the geographic regions of Virginia, students can observe:

- Live animals and plants in their natural habitats
- Plant and animal life cycles, food chains and food webs
- Animal survival adaptations for finding food and shelter, rearing young, avoiding predators and defense
- Animal migration, camouflage and hibernation
- Endangered and threatened species
- Vertebrates and invertebrates
- The importance of conserving Virginia's animal, plant and mineral resources
- Habitats of pond, forest, stream, Chesapeake Bay, cypress swamp, mountain cove, cave and more
- Virginia's prehistoric past: rocks, minerals, fossils
- Phases of the moon, reasons for the seasons, earth's revolution and rotation, planets in our solar system

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Scheduling a Program

- Select your desired program title(s).
- Choose your optimum program date(s) with possible back-up dates.
- Determine the approximate number of students and adult chaperones. (Remember one adult chaperone per 10 students is required and free.)
- Call our Reservations Coordinator at 757-595-9135 between 9 a.m. and 4:30 p.m., Monday through Friday.
- A confirmation packet containing important information about your program will be sent directly to you.

ACCREDITED BY THE
**ASSOCIATION
OF ZOOS &
AQUARIUMS**



Observe over 250 live, native Virginia animal and plant species during a **SELF-GUIDED TOUR** of the exhibits at the Virginia Living Museum. Students can visit Discovery Centers for hands-on enrichment...giving them a "learn by doing as well as by seeing" experience.

SELF-GUIDED VISIT
\$7 per student • \$16 per adult
Groups of 10 or more

A self-guided exhibit tour is included with any on-site reserved program in this guide.

Funded in part by
Wason Realty

Discovery Centers

Four different interactive Discovery Centers await your students' exploration. These hands-on Centers are brimming with specimens from the worlds of life science, space science and geology. From a visible bee hive "buzzing" with activity to student-use microscopes to our Chesapeake Bay Touch Tank, each Center is sure to engage your students.

Virginia's Coastal Plain Gallery

From the forests beyond Virginia's coastal marshes to the waters of the Chesapeake Bay and beyond, the Coastal Plain Gallery highlights animals and habitats that characterize the eastern-most region of our state. "Wade through" the Cypress Swamp Habitarium, a recreation of vital and endangered wetland habitat. This impressive two-level gallery features an entire community of plants and animals that are at home in a cypress swamp.

Virginia's Piedmont & Mountain Gallery

Your students will be "nose-to-nose" with a captivating variety of flying, crawling, swimming and climbing animals found in the Piedmont and Mountain Regions of Virginia. These engaging exhibits help students piece together the connections between habitat, adaptation and survival. "Hike" through the spectacular Mountain Cove Habitarium, where the sounds, sights and communities of native plants and animals are like taking an instant field trip to the mountains.

Virginia's World of Darkness Gallery

Flying squirrels, bats, tree frogs and other nocturnal animals are active during the day in this fascinating area. Meet animals such as lobsters and rays that make their living in the inky twilight of Virginia's coastal waters.

Virginia's Underground Gallery

"Underground" doesn't mean just dirt! Walk through and explore the intriguing geology – and critters – of a limestone cave! Journey back through Virginia's ancient past by learning about fossil remains preserved beneath our feet. Marvel at the beauty of rocks and minerals that formed deep under the Earth. It's all here in Virginia's Underground!

Outdoor Boardwalk Exhibits

Lakeside boardwalk and woodland trails lead from otters to endangered red wolves, from bobcat to bald eagles, with many other animals in between. Students will marvel at the variety and beauty of resident and migratory birds in our Coastal Plain Aviary.

Abbutt Observatory

This area is open for safe viewing of the sun, weather permitting. Here you can learn about telescopes and see sunspots, flares and solar prominences.

Conservation Garden

Learn how to build, live and garden "green" in the Goodson Living Green House and Conservation Garden.

Virginia Garden

Discover native food and medicinal plants used by the Indians and early settlers, plants introduced from Europe that became naturalized and New World plants that were prized by European collectors.

Changing Exhibits Gallery

Throughout the year, new interactive and highly informative natural history exhibits are featured in this special gallery.

Feb. 11 - April 29, 2012 Smokey Bear & Woodsy Owl

Join the U.S. Forest Service's Smokey Bear and Woodsy Owl to learn about the outdoors and caring for the land. Explore the pretend forest, ranger's station, campsite and more in this exhibit from the Betty Brinn Children's Museum.

May 25 – Sept. 3, 2012 Dinosaurs

Stomping, roaring dinosaurs return! Tremble at a growling 12-foot-tall T-Rex, watch dinosaur mothers tend their broods, see the bony-plated Stegosaurus, the long-necked Elasmosaurus, and more.



GRADES K-5: *explore fundamental natural science concepts*

*In our **NATURAL SCIENCE PROGRAMS** your K-5 students handle real museum specimens, meet live animals and become actively engaged in learning important SOL science concepts.*

Bay BCs – Grade K

Science SOLs K.1 K.2 K.7 K.11

From crabs and sea stars to turtles and birds, young students explore the rich variety of life that fills our Chesapeake Bay and learn simple ways to protect the Bay's fragile environment.

Animal ABCs – Grades 1-2

Science SOLs 1.1 1.5 2.1 2.4 2.5

Discover the animal ABC's of survival on land, air and water. Examine reptiles, birds and mammals for special adaptations that make it possible for them to climb, crawl, swim and fly. Special emphasis is given to frog and butterfly lifecycles.

Water Critters – Grades 1-2

Science SOLs 1.1 1.5 2.1 2.5

Fins, flippers, body shapes and other unique adaptations for life in water are compared in various aquatic animals. "Hands-on" specimens of frogs, turtles and even crabs truly bring water critters to life!

Cycles of Survival – Grades 2-3

Science SOLs 2.4 2.5 2.7 3.1 3.4 3.8

Where do bats, butterflies and birds go in winter? Why are some insects a tasty meal for an animal, while others are left alone? Hibernation, dormancy, migration and mimicry – these and other fascinating animal adaptations and behaviors are explored and explained in this fun and engaging inquiry-based program.

Thinking like a Scientist – Grades 2-3

Science SOLs 2.1 2.4 2.5 3.1 3.4 3.10

Observing, predicting, classifying, measuring, collecting data and graphing are key elements in every good scientist's "toolbox." Students will hone these scientific investigative skills as they delve into mysteries based on real-life sea turtle research.

LENGTH OF PROGRAM
45 minutes

NUMBER OF STUDENTS
60 maximum

FEE (includes self-guided tour of permanent exhibits)
Contract Schools: Please call for information
Other Schools: \$9.75 per student (\$360 minimum per program)

SOL Revisions

SOL correlations for these programs have been aligned with the SOLs for science adopted in 2010. Information concerning the VA. Dept. of Education timetable for full implementation of the revised SOLs can be found at www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml.

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FERGUSON®

Nobody expects more from us than we do™



Dinosaurs – Grades 3-4

Science SOLs 3.1 3.4 3.5 4.1 4.5

Introduce students to the fascinating world of fossil history with dinosaurs. Discover the most up-to-date information about T-Rex, “Brontosaurus” and other dinosaur relatives. Touch “living fossils” and meet a possible living descendant of these prehistoric giants.

Web of Life – Grades 3-4

Science SOLs 3.1 3.4 3.5 3.10 4.5

Piece together an ecological puzzle to reveal the basic concepts of photosynthesis, food chains and food webs. Meet some of the “living” links that form nature’s chain of energy and learn about fascinating adaptations that help them survive.

Plants & Animals: Teamwork in Nature – Grades 3-4

Science SOLs 3.4 3.5 3.6 3.7 3.8 3.10 3.11 4.4 4.5

Do plants need animals? Or do animals need plants? The answer is “They need each other!” This program explores the amazing interactions of plants and animals with role-play activities, live animals and hands-on specimens from the Museum’s collections. Special emphasis is on plant structures and functions, pollination and how a wide variety of animals help keep new generations of green plants sprouting.

Earth Under Foot – Grade 5

Science SOLs 5.1 5.4 5.7

Our fascinating Earth constantly recycles itself! From igneous to metamorphic to sedimentary – the dynamic geologic forces illustrated by the rock cycle and Earth’s structure are explored and explained in this engaging hands-on earth science program.

Inside Skeletons! – Grade 5

Science SOLs 5.1 5.5

See what fish, birds, frogs and other animals look like from the inside out as students compare living vertebrates and invertebrates with their skeletons. Learn how bones help bats fly, snakes crawl, moles dig and more! Examine a human skeleton to see how we fit into the bony world!

Snakes Alive! – Grade 5

Science SOLs 5.5

Meet some of the most fascinating but misunderstood animals – snakes! Learn about the natural history of snakes with a safe, close-up look at Virginia’s venomous and non-venomous species.



***ENVIRONMENTAL SCIENCE LABS** spark the excitement of scientific discovery for students in grades 6-12. Students conduct experiments, collect data and analyze results in these effective inquiry-based programs.*

Amphibians and Reptiles

**Science SOLs LS.1 LS.4 LS.8
BIO.1 BIO.4 BIO.6**

In this inquiry based lab, students investigate structural and behavioral adaptations for feeding, locomotion and reproduction of these two major vertebrate groups by observing live reptiles and amphibians, and examining real Museum specimens.

Exploring with the Microscope

Science SOLs 6.1 LS.1

Students explore a fascinating hidden micro world while practicing the fundamental skills of working with compound and dissecting microscopes. Students then apply these skills to solve puzzling micro-mysteries by searching for clues in fossil sands, pond water, insect anatomy and more.

Fossil Studies

**Science SOLs LS.4 LS.13 ES.2 ES.7 ES.9
BIO.7**

Students investigate real fossil specimens of bones, tracks, teeth and more to uncover clues about animals that lived millions of years ago and their environments. By examining fossils, students draw conclusions about change over time and discover some of the challenges faced by paleontologists today.

Minerals

Science SOLs ES.1 ES.2 ES.4 ES.5

In this inquiry-based lab students examine rock and mineral specimens from the Museum's collections to learn to identify and classify common and rare minerals, identify unknown minerals using basic analytical tests and discover the importance of minerals in everyday life.

Vertebrate Biology

Science SOLs LS.1 LS.4 BIO.4 BIO.6

Biology comes to life in this comparative hands-on inquiry-based overview of the vertebrate classes. Using live animals and real Museum specimens, students compare and contrast the structures and survival adaptations of fish, birds, reptiles, amphibians and mammals.

Virginia's Prehistoric Past

**Science SOLs LS.13 ES.2 ES.5 ES.7 ES.9
BIO.7**

Using real rock, mineral and fossil specimens from Virginia's physiographic regions as well as "living fossils" as clues, students discover evidence of colliding continents, ancient seas, volcanic upheavals and ice ages that were part of Virginia's prehistoric past that shaped Virginia as we see it today.

Weather Studies

Science SOLs 6.1 6.3 6.6 ES.1 ES.2 ES.12

Equipped with anemometers, barometers and other scientific weather instruments, students investigate weather phenomena and conduct experiments to discover how temperature, air pressure, and wind circulation affect weather conditions on planet Earth.

"MEANINGFUL WATERSHED EXPERIENCE" PROGRAMS

Life in the Chesapeake Bay

**Science SOLs LS.4 LS.6 LS.8 LS.9
BIO.4 BIO.6 BIO.8**

Students discover the amazing diversity of life in the Bay by comparing and contrasting the adaptations and survival strategies of marine vertebrate and invertebrate phyla. Using live and preserved specimens in an inquiry-based format, students identify and classify organisms that make up the Bay's communities and investigate food pyramids and abiotic factors that affect Bay life.

Pond Life

**Science SOLs 6.1 6.5 6.7 LS.1 LS.4
LS.5 LS.6 BIO.1 BIO.4 BIO.8**

With plankton nets, bottom dredges, dip nets and other specialized field equipment students study first hand the ecology of a pond by collecting aquatic organisms in their natural habitat. Using sorting trays and field equipment, students investigate (and then release) the collected specimens, learn to identify and classify them, and create a pond food web.

LENGTH OF PROGRAM
1.5 hours

NUMBER OF STUDENTS
30 maximum

FEE (includes self-guided tour of permanent exhibits)

Contract Schools: Please call for information

Other Schools: \$11.75 per student (\$275 minimum per program)

SOL Revisions

SOL correlations for these programs have been aligned with the SOLs for science adopted in 2010. Information concerning the VA. Dept. of Education timetable for full implementation of the revised SOLs can be found at www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml.

Funded in part by

VuBay Foundation



*Journey into the field for a day of unforgettable learning experiences. Our **SCIENCE SAFARIS** give students an exciting and engaging combination of in-class laboratory instruction and hands-on topical field study.*

Cave Ecology – Grades 7-12

Science SOLs LS.6 LS.8 LS.10 LS.11 ES.1 ES.2 ES.7 ES.8 BIO.1 BIO.4 BIO.8

Descend into the fascinating world of twilight zones and troglobites while exploring wild caves in western Virginia. Learn the geology of cave formation and growth by examining soda straws, popcorn and other dripstone formations. Search for bats, salamanders and other cave animals and discover their unusual adaptations for survival in this unique ecosystem. (NOTE: This is a strenuous trip. Participants must be able to walk easily without assistance on uneven ground including some steep slopes.)

Field Mineralogy – Grades 6-12

Science SOLs 6.1 6.4 PS.1 PS.2 ES.1 ES.2 ES.4 ES.5 ES.7

Make your earth science curriculum come to life with an all day field excursion to Virginia's mineral rich Piedmont region. Students will search for specimens such as mica, garnet, feldspar, magnetite and more. Students learn to identify their collected rock and mineral samples using diagnostic tests and then apply their data to interpret the ancient environments that formed the specimens. Virginia's mineral resources are correlated to commercial applications in daily life.

Freshwater Aquatics – Grades 7-12

Science SOLs LS.4 LS.6 LS.8 LS.9 LS.11 BIO.1 BIO.4 BIO.6 BIO.8 CH.1

Travel by canoe through a freshwater ecosystem teeming with aquatic life from duckweed and water lily to bass and beaver. Determine the primary productivity of this rich pond community through dissolved oxygen studies and investigate the pond's successional stage. Students analyze collected data to identify natural and man-induced factors that lead to eutrophication of aquatic ecosystems.

Paleontology – Grades 6-12

Science SOLs LS.4 LS.8 LS.13 ES.1 ES.2 ES.9 BIO.4 BIO.6 BIO.7 BIO.8

Journey millions of years back in time in search of fossils that reveal Virginia's prehistoric past. Dig into fossil sands to uncover abundant marine organisms that can include star coral, Jefferson's scallops, whalebone and shark teeth. Students collect, identify and analyze fossils to reveal the history of an ancient ocean environment that once existed in what is now Virginia's Coastal Plain region.

LENGTH OF PROGRAM
6 - 12+ hours
(varies with destination)

NUMBER OF STUDENTS
25 maximum

FEE

Contract Schools: Please call for information

Other Schools: \$30 per student (\$650 minimum per program)

Cave Ecology

(\$35 student/\$700 minimum)

Fuel surcharge may apply.

SOL Revisions

SOL correlations for these programs have been aligned with the SOLs for science adopted in 2010. Information concerning the VA. Dept. of Education timetable for full implementation of the revised SOLs can be found at www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml.

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“MEANINGFUL WATERSHED EXPERIENCE” PROGRAMS

Chesapeake Bay Ecology – Grades 6-12

Science SOLs 6.1 6.3 6.5 6.7 6.9 LS.4 LS.6 LS.8 LS.9 LS.10 LS.11 BIO.1 BIO.4 BIO.6 BIO.8

Seining in shallow off-shore water and dip-netting in a salt marsh are just two of the day's many activities as students learn first-hand about the biology and ecology of the Bay. One of the last natural shorelines in our region provides the stage for collection and classification of a rich diversity of plants and animals. Assessment of increasing human impact and the need for wetland preservation are areas of special emphasis.

Estuarine Ecology – Grades 7-12

Science SOLs LS.4 LS.6 LS.8 LS.9 LS.10 LS.11 BIO.1 BIO.4 BIO.6 BIO.8

Board canoes for an exciting on-the-water study of a local estuarine ecosystem. From their floating laboratory, students monitor salinity and other physical factors that affect the survival of creatures in the Chesapeake Bay. Students learn first hand about the importance of this productive ecosystem by observing killifish, blue crabs, grass shrimp and other organisms in their natural habitat.



Our PLANETARIUM PROGRAMS are out of this world!! Inside the digital Abbitt Planetarium theater, students will make important connections to essential space science SOLs as they explore the solar system, travel to distant galaxies and marvel at the mysterious celestial objects in our own night sky.

Virginia Skies – Grades K-12

Science SOLs vary by grade level

Explore the evening skies above Virginia. Students view the Planetarium's night sky while a staff astronomer discusses seasonal constellations, visible planets and other celestial happenings around the time of your visit. This program can be tailored for any grade level and is especially effective for introducing kindergarteners to the planetarium experience.

The Skies of Jamestown – Grades 1-5

Science SOLs 1.1, 3.8, 5.1

History and Social Science SOLs 1.1 3.2 3.3 4.1 4.2 4.3 4.7 5.1 5.2 5.9

Students will discover the dangers of ocean travel in the early 1600s and come to better understand how important the stars were to two cultures as the colonists began to learn how to live with their Powhatan neighbors. This program includes a live discussion of the stars, planets and other heavenly bodies we see today in skies above Jamestown.

Day and Night – Grade 1

Science SOLs 1.1 1.2 1.6

As the Earth turns on its axis it produces the most noticeable changes in the sky apparent to a child. Through interactive demonstrations and the use of new digital technology a staff astronomer will explain the relative motions of the Sun and Earth in a way that is easily understood by young students.

The Zula Patrol: Under the Weather – Grades 2-3

Science SOLs 2.1 2.3 2.6 3.1 3.9

An intrepid band of animated space heroes, the Zula Patrol, is sure to get your students excited about weather science. Students will be introduced to different kinds of weather, discover the elements that make up weather in a given place and even compare weather on different planets in this fun and memorable program.

Follow the Drinking Gourd

Grades 2-5

Science SOLs 3.1 3.8 4.7

History and Social Science SOLs 2.9 3.3

4.7 5.7

Experience the fear and joy of an escape to freedom from the tyranny of slavery. Students analyze celestial clues written in the title song and view the Planetarium's night sky to discover how to navigate their way north. This program, an exciting combination of science and social studies, explores the skies of the U.S. as interpreted by slaves seeking freedom.

Assignment Earth – Grades 3-4

Science SOLs 3.1 3.8 3.11 4.7

There's an Alien among us! - and he can help students understand the confusing interconnections between the Earth, Moon and Sun. This exciting and engaging program will capture your students' attention and help them learn about Moon phases, tides, Earth motions, seasons and more.

Reasons for the Seasons – Grade 4

Science SOLs 4.1 4.7

Most elementary students have difficulty understanding the causes that result in the Earth's seasons. In this engaging program, a staff astronomer effectively explains how the motions of the Earth make themselves evident to us on the ground and clears up common misconceptions about how the seasons change.

Oasis in Space – Grades 5-9

Science SOLs 5.1 5.4 5.7 6.1 6.4 6.5 6.8 ES.4 ES.12 ES.14

Discover the uniqueness of our home planet as we tour through the solar system, seeking that most basic necessity for life – water. Does water exist elsewhere in the solar system? Can life survive beyond the confines of Earth? These questions and more will be discussed in this visually stunning program about the origins and nature of the worlds that surround us.

LENGTH OF PROGRAM

45 minutes

NUMBER OF STUDENTS

60 maximum

FEE (includes self-guided tour of permanent exhibits)

Contract Schools: Please call for information

Other Schools: \$9.75 per student (\$360 minimum per program)

SOL Revisions

For the 2011-2012 school year, SOL correlations for planetarium programs will remain aligned with the SOLs for Science adopted in 2003. Information concerning the VA. Dept. of Education timetable for implementation of the SOLs revised in 2010 can be found at www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml.

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Two Small Pieces of Glass – Grades 5-12

Science SOLs 5.1 5.3 6.1 6.8 ES.3 PH.8 PH.9

Originally produced in celebration of the 400th anniversary of Galileo's ground-breaking work with his telescope, this program takes your students on a journey through the history of telescopes, how they are made, and how they have helped astronomers make so many astounding discoveries about the universe. A brief look at the current night sky is included.

WSKY – Grades 5-12

Science SOLs 6.1 6.2 6.11 LS.1 ES.4

Learn about everything from the problem of light pollution to the eventual fate of the universe in this exciting planetarium presentation! Students will enjoy discovering more fascinating facts about stars, planets, galaxies, black holes and other celestial wonders with this lively program, which features three original space-themed songs.

Can't come to the Museum? Reserve an SOL-correlated science outreach program for your classroom. We'll challenge and engage your students with hands-on, minds-on instruction, live animals and real museum specimens, all designed to make important science concepts exciting and memorable.



CLASSROOM PROGRAMS Grades Pre-K - 3

A Walk in the Woods Grade Pre-K (Two identical 'mini-sessions' make up each program; 20 students maximum per mini-session)

Young students embark on a "classroom hike" to discover the fascinating world of mammals, birds, reptiles and insects. Live animals and hands-on natural objects will encourage young students to appreciate and respect living creatures while providing them with a memorable introduction to upcoming SOL concepts.

Wildlife of Virginia Grades K-1 Science SOLs K.1 K.2 K.6 K.7 1.1 1.5

In this up close and personal introduction to Virginia wildlife, students compare living mammals, birds and reptiles to learn about their habitats, and discover some of the special adaptations they have for getting around, avoiding predators and finding food.

Growing Up Wild Grades 1-2 Science SOLs 1.1 1.5 2.1 2.4 2.5

Follow the life cycles of animals that live nearby in the forest. As students meet a variety of live animals they discover why some animal babies don't look like their parents, find out how these animals change during their lives and learn how they can help protect these animals' woodland habitat.

Chain of Life Grades 2-3 Science SOLs 2.1 2.5 2.8 3.1 3.4 3.5 3.11

Each animal's struggle for survival makes all animals depend on each other. Through the introduction of living "links" from Tidewater food chains, students will better understand the role of green plants in food chains, learn how predators and their prey depend on one another and discover the important role that decomposers play.

ASSEMBLY PROGRAM Grades 3-7

Amazing Animal Adaptations
Science SOLs will be custom-correlated to your grade level
Designed to reinforce multiple life science SOL concepts, this program features live animals, specimens from the Museum's collections and audience participation in a memorable large group format. Students compare and contrast physical and behavioral adaptations and actively participate in activities that help them better understand how animals locate food, escape predators and overcome survival challenges every day in the wild.

**CLASSROOM PROGRAMS
GRADES PRE-K - 3
LENGTH OF PROGRAM
45 minutes**

**NUMBER OF STUDENTS
60 maximum**

**FEE
\$235 first program
\$205 additional program same day
Fuel surcharge may apply.**

**ASSEMBLY PROGRAM
GRADES 3-7
LENGTH OF PROGRAM
45 minutes**

**NUMBER OF STUDENTS
200 maximum**

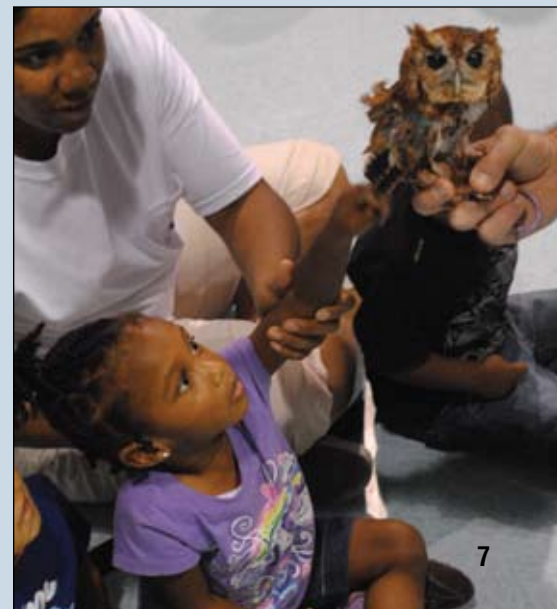
**FEE
\$295 first program
\$245 additional program same day
Fuel surcharge may apply.**

SOL Revisions

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Funded in part by

**Rouse-Bottom
Foundation, Inc.**



Bring the fun and exciting learning experience of the Virginia Living Museum into your own classroom. **DISCOVERY BOXES** are "museums-in-a trunk" traveling curriculum modules that you can use in class for active hands-on learning your students will love!!

RENTAL FEE
(automatic delivery and pickup are included)

Contract Schools:
\$95 per week
\$80 for the next consecutive week

Non-contract Schools:
\$125 per week
\$110 for the next consecutive week

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Natural History of Early Virginia



Each topic is developed thematically and contains natural history specimens and artifacts from the Museum's collections for hands-on use by students, as well as activities, audio visual materials, children's books, reference materials, activity guides, resource information and more.

A teacher resource packet provides information on each specimen and suggested activities for implementation into the curriculum.

Amazing Astronomy

Real meteorites, tektite, earth rocks and minerals identical to those found on the Moon and Mars, spectrometers, lenses, mirrors, a Rive Ray box, A/V materials, posters, scale model of the solar system, distance to the nearest star tape and comet balls.

Be a Tree

Collections of leaves, wood, seeds and flowers; real taxidermied mounts of bat, bird, insects and other tree-associated animals; tree products, bark rubbings, petrified wood and puppets.

Digging Dinosaurs

Real dinosaur bones, teeth and other fossils; casts of dinosaur skin, eggs and skulls; dinosaur hatchling sculpture, scale models and puppets.

Hawks to Hummingbirds

Bird skeleton, feathers, taxidermied bird mounts, fossil cast, puppets; eggs, nests and embryos; bird bands, bird feeder, bird house and student microscope.

Incredible Insects

Insect mounts, collections, eggs and architecture, fossil insects, scale models, insect products, beekeeper hat and glove, insect eye viewer and student microscope.

Natural History of Early Virginia

Natural items used by Virginia's Native Americans and Jamestown settlers for survival, trade, food, jewelry, music and toys. Includes puppets, corn grinding mortar and pestle with corn to grind, artifacts, animal furs, bone/horn tools, feathers, Native American crafts and skulls with skull key.

Shark Secrets

Real shark jaws, shark skeleton, shark skin and fossil shark teeth, shark embryo and eggs, shark products, stingray mount, posters and puppets.

Snakes Alive

Real snake skeletons, skulls, taxidermied mounts, collection of reptiles and amphibians, snake eggs, embryos, fossils, skins, reptile products, puppets and posters.

Tropical Rainforest

Museum specimens of insects, crystals, leaves, piranha; skins and feathers of endangered tropical bird species, rainforest products, scale models and puppets.

Under the Bay

Museum mounts of fish, squid, skates, algae; collections of shells, crabs, corals, sea stars; scale models, posters, puppets and student microscope.



Our nationally-recognized TEACHER TRAINING INSTITUTE provides outstanding SOL-correlated, grade-level targeted professional development workshops and graduate level courses in life, environmental and earth science instruction for teachers of grades pre-K-12.

Workshops for K-12 Teachers

The Museum's Teacher Training Workshops are designed to increase teacher competency in life, earth, and environmental science classroom instruction. Workshops focus on providing effective SOL-correlated, hands-on techniques that have been classroom tested. Strengthen your content background and discover a wealth of grade-level targeted activities to use in your classroom.

Check the Museum's website www.thevlm.org for information about upcoming teacher workshops.

Teacher Training Programs for School Systems

We custom develop SOL-correlated, grade-level targeted life, earth and environmental science teacher training programs to meet your specific professional development objectives.

School system administrators please call 757 595-1900 x 216 for information.

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PREPARING FOR YOUR VISIT

Before the Visit

- Forward the confirmation to all teachers and staff that will be attending the field trip.
- If you have scheduled a Program or Lab, review the Teacher Resource Guide for pre/post-visit activities and questions.
- Distribute and collect permission slips/payment from students.
- Discuss field trip with students, including pre-visit classroom activities and rules for the Museum.
- If parents are invited to chaperone, get confirmation of the number attending at least one week prior to field trip.
 - Assign students to specific chaperones
 - Fill out Chaperone Guides
- To make the visit more meaningful, print out our grade-oriented Exhibit Guides.
 - Don't forget to bring pencils!
- We encourage teachers to come to the Museum with planned activities related to the exhibits.
- One month before your visit, the School Group Coordinator will email the lead teacher to re-confirm your field trip.

Arrival Procedures

- Schools should arrive at least 20 minutes before first scheduled program to give time for orientation, payment, restroom breaks and regrouping.

Classroom Programs

- Please meet your program instructors at the specified meeting locations FIVE MINUTES BEFORE your scheduled program time.
- Parents are NOT guaranteed a seat in the program.
- Siblings are NOT allowed into the program.

Museum Rules

- Respect others in your group and other Museum visitors.
- Respect animals and habitats.
- Students are not permitted to carry backpacks/large bags in the Museum.
- No food or drink outside of designated picnic areas.
- Teachers and chaperones MUST stay with their groups at all times.
- For the safety and enjoyment of all visitors, disruptive or unsafe behavior will not be permitted and may result in the entire group being asked to leave without a refund.

FAQ's

- A student's family has a membership to the Virginia Living Museum; do they have to pay for their field trip?
 - Family memberships are only valid for

Teachers Please Note:

If you schedule a visit, you are entitled to reserve a free Teacher Check Out prior to your school's visit. To set up your check out, please call Reservations at 757-595-9135. Please bring your teacher ID.

Self Guided Visits and the parent must attend the field trip with their child.

- For classroom/planetarium programs, students are charged for the program itself and the Self Guided Visit is free.

- Rain is expected on the day of our field trip, can we eat in the Museum?

- Unfortunately, there are no indoor eating facilities available. In case of inclement weather we recommend eating on the bus, back at school or around the corner at Deer Park where tables and shelters are available on a first-come, first-served basis until 4 p.m. weekdays.

- Our school has reserved boxed lunches and gift bags, can we pay for these with our admission check?

- Payment for admission, gift bags and boxed lunches MUST be split out into separate checks as the Virginia Living Museum, Wild Things Museum Store and Wild Side Café are separate businesses.

When to Visit

Any time during the school year is a good time to visit, although the Museum is less crowded from September through February. Book early for the best selection of programs and dates.

Program days and times are filled on a first call first served basis. We highly recommend that teachers call as soon as possible after school begins (at least by the end of September) to increase their chances of receiving their preferred program dates.

Teachers may wish to consider reserving programs in the fall or winter when the Museum is generally less busy.

Contract School Systems

The Museum has contracts with the following school systems to provide pre-paid science programs:

- Newport News
- Gloucester.

Teachers in these school systems should contact the Museum to determine the specific programs available to them.

Length of Visit

A self-guided tour of the Museum's exhibits and outdoor trails takes 1.5 to two hours. Natural Science and Planetarium programs last 45 minutes. Environmental Science Labs last 1.5 hours.

Exhibits

The Museum's exhibits are both indoors and outdoors so be prepared for inclement weather. The Planetarium is located in an adjacent building.

Chaperones

Classroom teachers and school staff are admitted free. The Museum also requires one adult chaperone for every 10 students. These chaperones are admitted free. Additional chaperones are charged \$16 each. The Museum requires students to stay with their assigned chaperone in the exhibits and Museum store.

Payment and Cancellation

Payment for non-contract schools can be made by cash, check, credit card or the Museum can invoice. Two weeks notice is required for cancellations for all bookings. Payment for contract schools is handled by the school system.

Directions

The Museum is located at 524 J. Clyde Morris Blvd., Newport News, two miles off I-64 at exit 258-A. It is about 30 minutes from Williamsburg and Norfolk.

Hours of Operation

The Museum is open from 9 a.m. to 5 p.m. Monday through Saturday and noon to 5 p.m. on Sunday from Labor Day to Memorial Day. Summer hours are 9 a.m. to 5 p.m. daily.

Parking

There is plenty of free parking for buses and motorcoaches.



Picnicking

Outdoor picnic tables and vending machines for school groups are conveniently located on the Museum grounds. Some tables are covered. Please make alternate plans for rainy days. Large groups may want to picnic at nearby Deer Park where tables and shelters are available on a first-come, first-served basis until 4 p.m. weekdays. No outside food or drinks are allowed in the Museum.

Box Lunches

School groups may pre-order lunches directly from the Wild Side Café.

Museum Store

The Wild Things Museum Store carries a wide variety of fun and educational science and nature items, including a selection of useful teacher resource materials.

Pre-packaged gift bags are available for school groups when reserved in advance.

