



Expand Classroom Lessons and Enhance Opportunities for Discovery!

How do we pack so many engaging, memorable and awe-inspiring moments into our field trips? That's easy: we have it down to a science!

Give your students the chance to explore exhibitions, see films, participate in hands-on workshops, enjoy live demos and visit labs to truly experience how science, technology, engineering and math apply to nearly everything around them.

With dozens of customizable options, this guide will show you just about everything you can do on a group visit to the Science Museum of Virginia.

Once you're ready to book, head to **smv.org/groups** to fill out our online reservation request form. Still have questions? Give us a shout at **804.864.1400**. We're ready and waiting to help ensure your students have a stellar field trip.

Digital Demos

Need to stay put for now? Don't worry, we can come to you virtually! Check out page 13 to explore our Digital Demo offerings in case your class can't leave the building but still wants to experience Science Museum programs.

Homeschool Groups

Science Museum field trips aren't just for public and private school students. Homeschool cooperatives can expand their learning opportunities, too! Visit **smv.org/homeschoolgroups** to learn about how to book a field trip for 10 or more homeschoolers.

Contents

Touring Exhibitions	1
Classic Favorites	2
Other Spaces to Explore	3
The Dome	4-5
Demos	6
Hands-On Experiences	7
Science on a Sphere®	8
Field Trip Pricing	9
Group Booking Policies	10
Educator Resources	10
Make the Most of Your Visit	11
Digital Demos	. 12-13

Educator Perk: Free Admission!

What's the best way to ensure your students will be WOWed by all the field trip fun the Science Museum has to offer? Experience it for yourself, of course! That's why we give educators special perks, like free general admission. That's right: teachers can bring their school ID to the Science Museum anytime to get access to exhibitions, labs and demos at no cost. We know you'll see all we have to offer during your visit and want to bring your students back with you right away! Visit **smv.org** for details.

Science Museum of Virginia 2500 West Broad Street Richmond, Virginia 23220 804.864.1400 smv.org

Hours

Day after Labor Day–March 2 Tuesday–Sunday, 9:30 a.m.–5 p.m.

March 3–Labor Day Seven days a week, 9:30 a.m.–5 p.m.

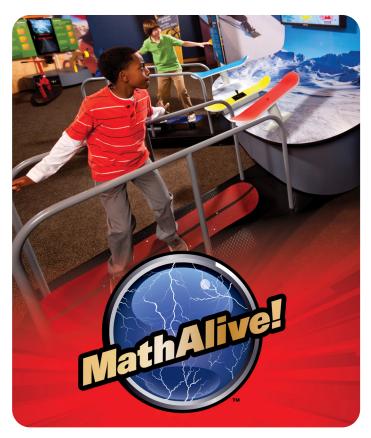
Be social! Follow us on Facebook, Instagram and YouTube.







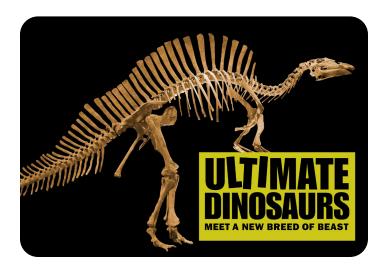
Touring Exhibitions

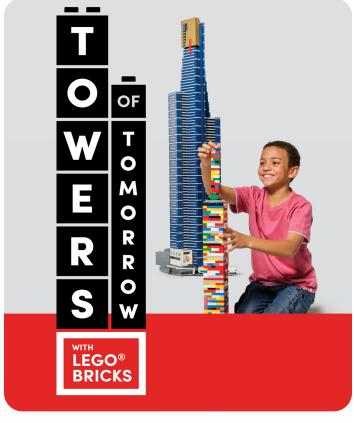


*MathAlive!*September 28, 2024-January 12, 2025

Make your Science Museum field trip count! Help students discover the fascinating ways math shapes music, sports, movies and games. They can join a thrilling 3D snowboard race, dive into robot step sequencing, navigate probability in cyber security, unveil the influence of fractions on music, master meteorological data to understand extreme weather and more.

Presented by Raytheon and produced by Evergreen Exhibitions in collaboration with National Aeronautics and Space Administration (NASA), National Council of Teachers of Mathematics, MATHCOUNTS, National Society of Professional Engineers, Society of Women Engineers and MathMovesU.





Towers of Tomorrow with LEGO® Bricks February 1-August 24, 2025

Let your students' imaginations run wild in this hands-on exhibition showcasing STEM, architecture and design. Featuring 20 of the world's most innovative skyscrapers built using more than half a million bricks, the exhibition inspires them to create their own "towers of tomorrow" with LEGO®s available in the interactive construction areas.

Produced by Sydney Living Museums and toured internationally by Flying Fish. Photo © James Horan for Sydney Living Museums

Ultimate Dinosaurs May 31-September 1, 2025

Prehistoric creatures meet cutting-edge technology! Featuring 20 full specimens from locations in the Southern Hemisphere, this interactive exhibition brings dinosaurs to life. Augmented reality transforms intricately detailed skeletons into moving, flesh-and-bones animals to reveal a new breed of bizarre dinosaurs that evolved in isolation during the Mesozoic Era.

Presented by the Science Museum of Minnesota. Created and produced by The Royal Ontario Museum, Toronto. Extra ticket required

Classic Favorites





Speed

Explore the mind-blowing intersection of motion and time across a world of science and technology. Students can race an Olympic athlete, feel hurricane-force winds, watch the world's slowest device in "motion," play games with a quick-thinking robot, examine a massive supersonic jet and more. There's no shortage of discovery as they experience some of the fastest and slowest things the universe has to offer.



Boost

This exhibition is so fun students won't notice they're learning! They can generate energy on a human hamster wheel, lift peers with the power of leverage, compose music using animatronic instruments, challenge classmates to a dance off and test their memory with brain games. Boost will really keep them on their toes. *Please note: This exhibition will be closed in September 2024 for maintenance.*

Thank you to our *Boost* kitchen sponsors Hamilton Beach and Wegmans.





The Forge

Harness the power of the maker movement, celebrate innovation and inspire students to roll up their sleeves to create. *The Forge* both champions and demonstrates the process of design and fabrication. Students can code their own sea creature, create digital wallpaper, program a 500 multicolored lighting piece, watch a robot create art, build a LEGO® showstopper and more.

Other Spaces to Explore



Animal Lab

Are your students critter curious? Give them the chance for an up-close encounter with frogs, snakes, cockroaches, spiders and more! They'll explore what different animals need to survive in their environment and how they eat, sleep and live.



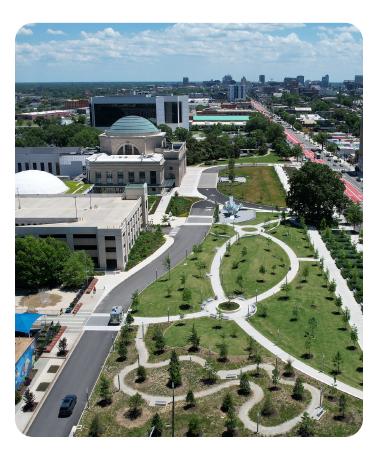
Eco Lab

In this small space, we go big on all things ecology. Students can inspect insect, rock and mineral specimens with a microscope and check out ever-rotating experiments. But the part that will keep students buzzing long after their visit is the observational honey bee hive.



Art Lab

Students can create their own scientific masterpiece. The Science Museum provides the materials and suggested activities and they provide the imagination! To keep things fresh, we change Art Lab activities periodically. An element of surprise is part of the fun!





Form Over Function: Selections from the Bridges Conference

Highlighting mind-bending, math-inspired works of art, this exhibition features sculptural objects that express concepts such as geometry, symmetry, dimensionality, tessellation and the Fibonacci sequence. We'll sum it up for you: this exhibition adds value to your field trip.

Seascapes of the 21st Century

Covering topics such as microplastics and algal blooms, this exhibition explores the far-reaching, negative impacts of pollutants. Compelling paintings and an award-winning short film demonstrate human impacts on the environment and aquatic creature health.

US By the Numbers

Data visualization doesn't have to be drab! Touch-screen technology lets students take a guess at the top ice cream flavor, hand washing prevalence, museum visitation and more. They'll be surprised by the stats when the answers are displayed on the massive projection screen.

The Green

Comprised of native flowers and trees, walking paths and interpretative signage, this six-acre urban greenspace is the perfect place to go for a nature stroll to watch pollinators at work. Check out our **Green Guide**, a printable nature journal activity, to help spark conversations about biodiversity and ecosystems.

The Dome

Take your students on an unforgettable adventure! With an impressive wrap-around, quarter-acre screen, The Dome is a powerful tool for connecting to the world through giant screen films and astronomy shows.

Features last approximately 45 minutes.



Here are three ways you can add a Dome experience to your field trip:

- Each month, the Science Museum rotates the films it shows for guests. Groups can purchase tickets to features on the general public schedule.
- If no general public tickets have been sold, groups of 50 or more can request a special Dome showing from any film in our group library. The film can change, but the showtime will adhere to the Science Museum's regular Dome schedule.
- Groups of 75 or more can book any Dome feature from our group library and can reserve a special time spot outside of the Science Museum's regular Dome schedule. Each of the above options is based on availability. Special showings and additional showtimes must be booked at least two weeks in advance.



Animal Kingdom: A Tale of Six Families

Grades K-12

Across snowy forests, under scorching African sun and into the darkest depths of the ocean, students will embark on an incredible journey to the far corners of the Earth. Featuring brilliant nature footage, this awe-inspiring adventure celebrates the diversity of life on our planet.

Science Standards of Learning

3 7 **1** 5 **2** 4, 5 **3** 4, 5 **4** 2, 3, 7

(5, 6, 7, 8, 9

Produced by Definition Films and distributed by K2 Studios



Wings Over Water

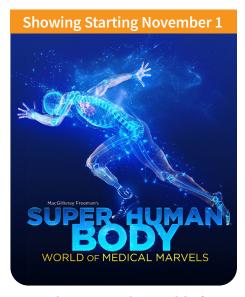
Grades K-12

As glaciers retreated at the end of the last ice age, they left connected rivers, lakes and wetlands across North America's heartland. Extraordinary footage and compelling stories help students understand the fascinating behaviors of three amazing bird species.

Science Standards of Learning

(§ 7, 9, 10 (§ 5, 7, 8 (§ 4, 5, 7, 8 (§ 4, 5, 6, 8) (§ 2, 3 (§ 8, 9 (§ 5, 6, 8, 9 (§ 8)

A film by SK Films, Dorsey Pictures and the Max McGraw Wildlife Foundation.



Superhuman Body: World of Medical Marvels

Grades K-12

Students will explore the world's greatest machine and learn about incredible breakthroughs in science and bioengineering that are changing the course of human health.

Science Standards of Learning

(S) 2, 10

Health Standards of Learning

1 1 **2** 1,2 **3** 3 **4** 3 **6** 1 **7** 1,2 **8** 1,2 **9** 1,2 **1**

Produced by MacGillivray Freeman Films and presented by Edwards Lifesciences and Griffin Catalyst.

Biology | Chemistry | SE Earth Science | SE Environmental Science | SE Life Science | Propriet Physics | Propriet Physical Science

The Dome

These educator-favorites are just a sample of the more than two dozen features in the Science Museum's film library. For the full list of features available in The Dome, and to watch trailers of the films you're interested in, please visit **smv.org/dome.**

Astronomy Shows

Big Astronomy

Grades 1-12

Technology helps but it's really the people who enable discoveries! Students will meet professionals with diverse backgrounds, talents and skills who run a world-class observatory and share in the excitement of discovery. *Available in English and Spanish.*

Science Standards of Learning

1 1, 2, 3, 6, 7 **2** 1, 2, 6, 7 **4** 1, 4, 5, 6 **5** 1, 2, 4, 6 **6** 1, 2, 3, 7 **8** 1, 2, 12 **8** 1, 5, 6, 7, 9 **1** 1, 5, 6, 7, 8, 9

Birth of Planet Earth

Grades 6-12

Take your students on the ultimate field trip: back 5 billion years to the origins of our planet! They'll discover how Earth became a living planet and what history tells us about finding other life in the universe.

Science Standards of Learning

6 2, 3, 4, 6 **S** 2, 5, 7 **S** 3, 4, 5

Live Astronomy Show

Grades K-12

Take off on a spectacular tour of space with a custom cosmic adventure designed specifically for your students! Pick your space destinations and let our astronomer be your guide as you explore the stars like never before. The best part: live astronomy shows can be tailored to meet your SOL needs.

Living Worlds

Grades 3-12

Whether earthly or alien, all life leaves a trace. Students will go on a journey through space and time to discover how life makes Earth liveable, where it could be found elsewhere in the cosmos and what new technologies are needed to find it.

Science Standards of Learning

4 1,3,5,7 **5** 1,6 **6** 1,2,4 **6** 3,4,5 **8** 7 **6** 2 **6** 2,3 **6** 5,6

Giant Screen Films

Dream Big

Grades 4-8

Celebrate engineering ingenuity and see innovation brought to life! From the world's tallest building to underwater robots, this inspirational film reveals ingenious inventions and iconic structures. Students will discover how today's engineers are shaping our tomorrow.

Science Standards of Learning

3 1, 2 **4** 1, 8 **5** 1, 2, 3, 9 **6** 1, 9 **8** 5, 8, 9 **8** 6

Into America's Wild

Grades K-12

Step off the beaten path on a cross-country adventure. Students will journey through little-known landscapes of North America to discover the hidden wonders of nature. They will see that America's wild places are as varied as they are stunning.

Sponsored by Allianz Partners Allianz (II) Partners

Science Standards of Learning

(\$ 4, 5, 7, 11 **1** 5, 7, 8 **2** 2, 4, 5, 8 **3** 5, 6, 7, 8 **4** 3 **5** 9 **6** 8, 9 **6** 8, 9 **6** 8, 9 **6** 8

Secrets of the Sea

Grades K-12

Featuring some of the ocean's strangest and most spectacular animals, this film showcases an astonishing array of marine creatures. From pygmy seahorses to giant manta rays, and from barnacle blennies to coconut octopuses, students will meet more than 70 aquatic species.

NEW!

Science Standards of Learning

(8 7 1 5 2 4, 5, 8 3 4, 5, 8 4 2, 3, 7 6 9 (6 4, 5, 6, 7, 9, 11 10 8

Volcanoes: The Fires of Creation

Grades K-8

Earth is a planet born of fire. From the continents to the air we breathe to life itself, all have been shaped by volcanic energy. Students will travel across the globe to learn how these forces of mass construction created extraordinary ecosystems and wildlife habitats.

Science Standards of Learning

47 **5**8 **6**5



Demos

Demos are just what they sound like: students watch a Science Museum educator demonstrate amazing scientific experiments! From chemistry to anatomy, and from biology to engineering, we have engaging demos covering a wide range of STEM topics.

Demos last approximately 30 minutes, and can accommodate 10-120 students. Adding a demo to your field trip depends on space availability.

The Science Museum offers demos during weekday operating hours from September to May. Demos must be booked at least two weeks prior to the field trip. Add a demo for \$4 per person.



Amazing Animals

Grades K-7

Students can have an up-close encounter with snakes, cockroaches and rats. They'll learn about what different animals eat, how they sleep and what they need to survive in their environment.

Science Standards of Learning

3 6,7 **1** 5 **2** 4,5 **3** 4 **4** 2 **3** 6,7,8,11

Heart Dissection

Grades 5-12

There's no better way to learn how a heart works than by watching an educator dissect a sheep heart while explaining its different parts and functions. Students will love learning about the cardiovascular system.

Science Standards of Learning

Illuminating Light

Grades 3-5

This demo really shines! Students will discover how light can be blocked, bounced and bent. Note: This demo has flashing lights and periods of darkness.

Science Standards of Learning

31 **4**1 **5**1,2,6

Phantatisc Physics **NEW!**

Grades 3-8

Students will be psyched for this actionpacked demo highlighting matter, motion, energy and force. It features a tennis ball launch, marshmallow explosion, vortex cannon and more.

Science Standards of Learning

3 2 **5** 2, 3, 4, 6 **8** 5, 8

Scientific Method

Grades K-6

Teamwork makes the dream work! Students and our educator will use the scientific method to collaboratively design and execute a soda-and-mint experiment that really pops.

Science Standards of Learning

1 1 1 2 1 3 1 4 1 5 1 6 1

Simple Machines

Grades 3-5

Students will explore the six types of simple machines by watching massive versions of wedges, pulleys, levers and more in action. It's simply sensational!

Science Standards of Learning

32 **5**2 **8**1

Sound Science

Grades 5-8

We'll blow your student's mind—but not their eardrums—with the power of sound. Educators will share visual representations of pitch, volume and more to help students understand the science behind sound waves.

Science Standards of Learning

51,5 **8**6 **9**5

Supercool: Liquid Nitrogen

Grades 2-8

How do solids, liquids and gasses react to super cold temperatures? Students will make predictions and observations as pennies shatter, balloons shrink and plants crumble.

Science Standards of Learning

23 **5**7 **6**5,6,7 **8**2,5



Hands-On Experiences

Creativity + scientific tools = a chance to truly engage in the STEM process! Students can investigate scientific phenomena while working collaboratively to imagine, plan, test and improve on design solutions. Students will evaluate their outcomes to spark ideas for future innovations.

Hands-on experiences last approximately 45 minutes and can accommodate 10–35 students. We only offer one hands-on experience in a timeslot.

The Science Museum offers the following challenges and workshops during weekday operating hours from September to May. Hands-on experiences must be booked at least two weeks prior to the field trip. Add a hands-on experience for \$4 per person.



Egg Drop Engineering Challenge Grades 3-12

Protecting items from breaking during shipping is big business! In this openended challenge, students work together to design a structure that can protect an egg from a two-story drop by measuring kinetic and potential energy as well as energy transfer.

Science Standards of Learning

31 **4**1 **5**1,3 **6**1 **8**1,5 **1**1,4

Forces of Flight Engineering Challenge

Grades K-7

Help students discover the fun of scientific investigation. They'll explore the forces of flight by designing an aircraft in this open-ended challenge. Don't wing it: their flying machine has to hover in our vertical wind tunnel!

Science Standards of Learning

(1 **1**1,2 **2**1 **3**1,2 **4**1 **5**1,3 **6**1

Intro to Robotics Workshop

Grades 3-6

See students put STEM into action as they work in teams to get their robot to navigate a maze and complete other challenges. They will be introduced to basic coding as they use a visual programming language to input commands.

Computer Science Standards of Learning

3 1, 2, 3, 4 **4** 1, 2, 3, 6 **5** 1, 2, 3 **6** 1, 2, 3

Magnets Workshop

Grades K-2

This workshop is especially attractive! Students will learn about the science of magnets and how we use them in our daily lives.

Science Standards of Learning

1,2 **2**1,2

Mass and Motion Engineering Challenge

Grades 4-8

It's time for some speedy science! Students will work in groups to build a bobsled and explore what variables can be changed to make it travel faster or slower down the track in this open-ended challenge.

Science Standards of Learning

41 **5**1,3 **6**1 **8**1,5,8

Plants and Their Pollinators Workshop

Grades 3-5

Watch the learning bloom! Students will explore plant anatomy as they dissect a flower to investigate plant reproduction and the importance of pollinators.

Science Standards of Learning

4 1, 2

Hotter, Wetter Virginia Workshop

Grades 6-12

By building with LEGO bricks, students will learn how to leverage design, engineering and natural landscapes to make communities more resilient to extreme heat and rain events.

Science Standards of Learning

6 1, 4, 6, 7, 9 **ES** 1, 12 **BD** 1, 8

Health Standards of Learning

6 1,3 **7** 1,3 **8** 1 **1** 1,3

Environmental Science Guidelines 1, 8, 9, 10, 11, 12



Science on a Sphere®

An educator will take your students on a journey across the globe and beyond in this animated display on a six-foot-diameter suspended sphereshaped screen. They'll explore weather and climate, the planets, volcanoes, ocean temperatures and more!

Science on a Sphere demonstrations last approximately 25 minutes, and can accommodate 10-30 students. We only offer one Science on a Sphere demo in a timeslot. Adding a Science on a Sphere demo to your field trip depends on space availability.

The Science Museum offers Science on a Sphere demos during weekday operating hours from September to May. Science on a Sphere demos must be booked at least two weeks prior to the field trip. Add a Science on a Sphere demo for \$4 per person.





Earth Science

Grades 5-8

Volcanoes and earthquakes and plate tectonics ... oh my! Students will track natural disasters from the past and look at more recent occurrences that have impacted the world.

Science Standards of Learning

6 8 **6** 5,7

Extreme Weather

Grades 6-12

Hurricanes are stronger and floods are more frequent. Why? Students will find out as they explore extreme weather events and how communities can be resilient to a changing climate.

Science Standards of Learning

6 6, 7 **1** 8 **8** 10, 11, 12

Health Standards of Learning

61 **7**1 **9**1 **10**2,3

Environmental Science Guidelines

1, 2, 7, 9, 11

Weather Junior

Grades K-2

Students will get wind of weather basics. An educator will make information rain about seasonal changes and how these processes affect all living things.

Science Standards of Learning

3 1, 8, 9 **1** 1, 7 **2** 1, 6, 7

Weather vs. Climate

Grades 3-5

Can your students explain the difference between weather and climate? Help them understand elements of each by seeing how heat is distributed around the planet and learning how hurricanes, typhoons and cyclones form.

Science Standards of Learning

4 4, 6 **5** 2



Field Trip Pricing

For groups of 10 or more, the Science Museum offers these special discounts:

Exhibitions + Dome + Live Science Program: \$18/person

Exhibitions + Dome: \$14/person

Exhibitions + Live Science Program: \$14/person

Exhibitions Only: \$10/person

Additional Live Science Programs: \$4/each per person

Because groups of 10 or more enjoy a special price for personalized visits, Science Museum memberships and other discounts are not valid toward group admission fees.

On the day of your visit, if additional guests join your group (including staff or chaperones), those guests will receive the general admission price. If space is available in The Dome, they must purchase a ticket to view the film with their group. Live Science Programs are not available to day-of, walk-in guests who are joining a group.

Chaperone Policy

We require one adult for every 10 students in your group. One adult for every 10 students will receive complimentary admission.

Payment Info

Payments can be made by credit card, check or purchase order. Payment is due two weeks prior to your arrival.

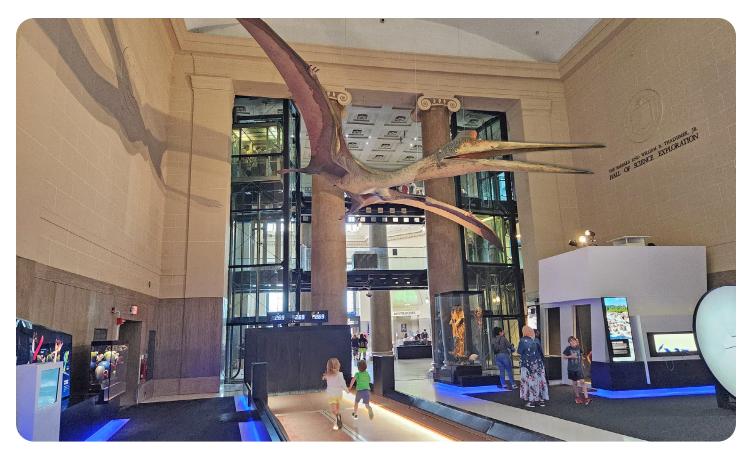
Collecting payment for your group on the day of your visit is challenging and delays the start of your adventure. If you are unable to pay in advance, we can invoice you. Please indicate that you need an invoice on the **group reservation form** when booking.



Financial Assistance

The Science Museum is known for memorable and unique adventures. To make that accessible to all, we have limited grant funding available for group visits in October, November, January or February. Funds are finite, and available on a first-come, first-served basis. All grant funding requests need to be made when booking the field trip.

To request financial aid for your upcoming adventure, you must indicate your Title 1 or low-income status on the **group reservation form** when booking. Requests for financial assistance will not be considered if they do not follow this process.



Group Booking Policies

We strive to give all guests the best experience possible, so we staff appropriately to support group visits. To allow us to provide an unforgettable experience for your group, we ask that you observe the following group policies:

- All students through 12th grade must be accompanied by an adult (chaperone or staff) at all times.
- To book a Live Science Program, reservations must be made a minimum two weeks in advance.
- Final group numbers are due two weeks prior to arrival.
- If you have to cancel your field trip, please notify us as soon as possible. Visits canceled within 48 hours will receive a refund, less a \$95 administrative fee.

Please visit **smv.org/groups** to read the Science Museum's full list of group visit policies.

Educator Resources

Many of our films and touring exhibitions have educational resource guides. To explore pre-visit materials, please visit **smv.org.** Look for the "For Educators" tab on the specific exhibition and film pages to get links to the materials.

After your visit, help your students keep the discovery going with our collection of experiments, activities, videos and more. Visit **smv.org/stayconnected** to check out nearly 50 hands-on and easy-to-understand activities about nature, astronomy, chemistry, fossils, circuitry and much more. Most activities are available in both English and Spanish.

Plus, if you don't already follow us on social media, now's the time to jump on board! We regularly post engaging content on Facebook, YouTube and Instagram that teachers can use to supplement classroom lessons throughout the year or send home with students on breaks.

Be social! Follow us on Facebook, Instagram and YouTube.







Let's do this!

When you're ready to book, please fill out our group reservation form at smv.org/groups.

If you can't access the Science Museum's website to schedule your field trip,
please contact Guest Services at 804.864.1400.

Make the Most of Your Visit

Lunch Time!

If your group plans to eat lunch at the Science Museum, please indicate that on the **group reservation form** when booking. Guest Services will schedule a tentative lunch location and time in advance of your visit. Lunch locations and timing are subject to change. Guest Services will confirm your group's lunch details upon check-in.

The Science Museum does not guarantee availability for a lunch location or time. Designated lunch locations are not strictly climate controlled and may include an outside area. Please be prepared to eat on your bus if there are no spaces available. Groups may not eat in the café.

Gift Shop

Help your students keep the fun going at home by stopping by our gift shop! From STEM kits to books to special Science Museum keepsakes, scientists of all ages will find something they love. Please note: an adult chaperone must accompany students at all times while in the gift shop.

Accessibility Accommodations

Our **Sensory Guide** includes accessibility and accommodation information to help you prepare for your group's visit. If any of your students or chaperones will need mobility, hearing or sensory assistance or translation services during your field trip, please note that in the accessibility section when you fill out the group reservation form at **smv.org/groups.**

Parking

Bus unloading/loading locations may change during periods of construction. Guest Services will share dropoff and parking information prior to the visit.

Bus drivers should extend their stop sign and turn on flashing lights only when actively loading/unloading guests. When students are not exiting/entering the bus, drivers need to retract the stop sign so traffic can flow in the loop.

Buses do not fit in the parking deck and attempting to park in the deck will damage the bus. Chaperones and additional guests meeting the group at the Science Museum should park in the parking deck.





© Dave Parrish Photography for Richmond Region Tourism



Digital Demos



If you're looking for a scientific adventure but you're unable to come to the Science Museum, consider a Digital Demo! Digital Demos, sponsored by the Virginia Lottery, are live, virtual lessons that are highly interactive and designed to involve students in STEM through inquiry and hands-on activities.

Digital Demos range in length from 30–45 minutes. They are \$150 per lesson for up to 90 students.

Digital Demos are available Tuesday–Friday from September–May. Digital Demos are available with the following start times: 9 a.m., 10 a.m., 11 a.m., 1 p.m., 2 p.m. and 3 p.m. After-school hours are available on request.

Visit **smv.org/virtualadventures** to learn more about technology requirements and how to best prepare for your Digital Demo.





Financial Assistance

To make Digital Demos accessible to all, we have limited grant funding available. Funds are finite, and offered on a first-come, first-served basis. All grant funding requests need to be made when booking the Digital Demo.

To request financial aid for your upcoming adventure, you must indicate your Title 1 or low-income status on the online reservation form when booking. Requests for financial assistance will not be considered if they do not follow this process.

Ready to book?

When you're ready to schedule your Digital Demo, please fill out our online reservation form at **smv.org/virtualadventures**. If you can't access the Science Museum's website, please contact Guest Services at 804.864.1400.

Digital Science Demos

Engage with a Science Museum educator as you explore anatomy, chemistry and physics! Science demos can accommodate up to 90 students.

Amazing Animals

Grades K-7

Students will meet snakes, cockroaches and rats. They'll learn about what different animals eat, how they sleep and what they need to survive in their environment.

Science Standards of Learning

66,7 **1**5 **2**4,5 **3**4 **4**2

(5 6, 7, 8, 11

Brain Dissection

Grades 5-12

Students will watch an educator dissect a sheep brain. How does your brain work? This demo is sure to make students think about the role of the nervous system.

Science Standards of Learning

LS 2 **BLO** 3

Eye Dissection Grades 5-12

You won't believe your eyes! Students will watch an educator dissect a cow eve while explaining its different parts and functions to see how the eyes and brain are connected.

Science Standards of Learning

LS 2 BLO 3 PH 6

Heart Dissection Grades 5-12

Students will love learning about the cardiovascular system! There's no better way to learn how a heart works than by watching an educator dissect a sheep heart while explaining its different parts and functions.

Science Standards of Learning

LS 2 BD 3

Radical Reactions

Grades 6-12

Chemistry is at its coolest when you put it into action! Students will see four types of chemical reactions, learn the difference between exothermic and endothermic reactions, and watch a colorless liquid transform.

Science Standards of Learning

6 5 **9** 3 **9** 5, 7

Supercool

Grades 2-8

How do solids, liquids and gases react to extremely cold temperatures? Students will watch as pennies shatter, balloons shrink and plants crumble. Matter will change state right in front of them!

Science Standards of Learning

23 **5**7 **6**5,6,7 **8**2,5

Digital Hands-on Engineering Challenges

Help your students have fun investigating scientific phenomena. They'll work collaboratively to imagine, plan, create, test and improve upon solutions to design challenges. We'll send you a list of common materials you will need to have ready before the lesson. Engineering challenges can accommodate up to 90 students.

Build a Better Parachute Grades 2-7

A little healthy competition gives students the chance to put their engineering skills to the test! Students will use gathered supplies to try to build the most successful parachute in the class.

Science Standards of Learning

21,2 **3**1,2 **4**1 **5**1,3 **6**1 **8**1

Paper Airplanes

Grades 2-7

Forces + flight = fun! Student learning will soar as they experience scientific investigation by designing and testing paper airplanes.

Science Standards of Learning

21,2 **3**1,2 **4**1 **5**1,3 **6**1 **8**1

Sponsored by the Virginia Lottery





Science Museum of Virginia

2500 West Broad Street Richmond, Virginia 23220

804.864.1400

smv.org





