

# Do the SOLs have you calling out an S.O.S?



**Mad Science to the rescue! We'll turn your students into...**

**SUPERSTARS OF SCIENCE!  
(S.O.S)**



**Interested yet? You should be!**

**Need more information? Here are some frequently asked questions:**

## **How does the Superstars of Science program work?**

The S.O.S. Program is a series of one-hour workshops that uses fun science to reinforce the SOL objectives fifth graders will be tested on in May. Better than a field trip, we come to you! Each student will get a hands-on learning experience that will cement the objectives as outlined by the Virginia Department of Education (VDOE). Workshops are taught in a standard classroom during the school day.

## **How thorough is the coverage in the Superstars of Science program?**

We offer workshops that correspond with each of the seven standards for 5th grade. We also offer topics that review key concepts students learn in 4th grade but will see on the SOL exam including Electricity and Photosynthesis. You can choose the length of program that fits your needs. There is no minimum program length. However, we have seen the best results with monthly visits throughout the school year.

## **Does the Superstars of Science program replace classroom instruction?**

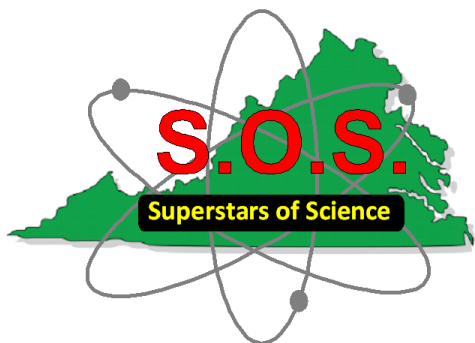
No. We can help your teachers by bringing fun science to the students but nothing can substitute for ongoing learning in a classroom. The Superstars of Science program is designed to supplement classroom instruction by emphasizing the specific skills and concepts outlined by the SOLs.

## **Why should we use the Superstars of Science program in our school?**

Anyone who has spent more than five minutes with fifth graders knows how long (or short) their attention spans are. Programs that use different methods of teaching get through to students; we use visual, tactile, and auditory teaching methods in our workshops. With the Superstars of Science program, students experience the SOL objectives, not just hear about them.

## **Still need more information?**

If you would like to schedule the Superstars of Science program or if you have any questions, call us today!



**Mad Science of Hampton Roads**

757-502-8124

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*We also do assemblies, after-school STEM Learning Labs, birthday parties, summer camps and more! Check out our website at [hamptonroads.madscience.org](http://hamptonroads.madscience.org)*

# The Superstars of Science Workshop Descriptions

***The Superstars of Science program is designed to supplement your school's current science curriculum by using hands-on experiments, interactive discussions, and exciting demonstrations. Our workshops reinforce key concepts and skills the students will see on the Science SOL test.***

**5.1 – Turn up the Volume** - This workshop introduces the concept of measurement through hands on activities that provide opportunities for children to learn proper way to measure volume. Through inquiry-based teaching methods, students will be introduced to and work with different items and challenges to engage their critical thinking and measuring skills.

**5.2 - Sonic Sounds** - Uncover the source of sound and turn everyday objects into musical instruments. Learn how sound waves fill your ears with vibrations. Create sound effects and change the pitch of your voice.

**5.3 – Lights, Color, Action** - Discover the visible and non-visible light spectrum using a UV light. Understand refraction with prisms and see an indoor rainbow with our diffraction glasses.

**5.4 – Matter of Fact** - Investigate the ingredients of the universe – atoms, molecules, elements and compounds! Students will build their own model molecules, and mix their own solutions as we discuss physical and chemical changes and the three states of matter.

**5.5 – Ecosystems Explorations** - Your students will learn about the interconnections that exist between all living things in an ecosystem, including humans. The nature cycles, food chains and energy webs within different environments are explored.

**5.6 – Life in the Sea** - Explore different ocean ecosystems and learn about the plants and animals that live there. Classifying creatures from sharks to sponges gives students a taste of ocean diversity. Hands-on activities teach the interconnectedness of an ocean food web, and the consequences of overfishing.

**5.7 – Mineral Mania** - Students investigate the relationship between rocks and minerals and review the major categories of rocks – igneous, metamorphic and sedimentary. Hands-on activities allow students to see the processes of weathering, erosion and deposition up close, along with identifying the unique characteristics of different rock samples.

**4.2 – Moving Motion** - Children catapult into Newton's three laws of motion! They yank a cloth from under dishes, send crash test dummies flying and launch mini-rockets across the room. Children drop two balls of different weights to see which will hit the ground first!

**4.3 – Electricity** - Excite some electrons as you construct some serious circuits during this program all about electricity. Test various materials for conductivity with space-age plasma balls. Finally, see indoor lightning with our Tesla Coil.

**4.4 – Photosynthesis** - This workshop provides a review of the chemical processes in a plant, plant respiration, and the role of plants in food webs. We discuss different types of plants, their leaves and the products they produce.

## RECENT SUCCESS STORIES

**Terra Harris, Principal of An Achievable Dream Academy, Newport News Public Schools:**

"Mad Science of Hampton Roads has been the 'sun' to our 'shine'! We have utilized their services for the last couple of years and not only had excellent SOL scores, but the love of scientific investigation and inquiry has been embedded in our students! Our teachers love and appreciate the facilitators – student interaction, high energy lessons, the questioning techniques used and more!" (83% SOL pass rate, 2 percentage points higher than last year!) *August 2016*

"We wanted to let you know that our 2014-15 Grade 5 Science SOL scores were amazing—81% pass rate! That is a 20% gain from the 2013-14 school year and we know that your program and activities contributed to that gain! We can not wait to partner with you for the 2015-16 school year!" *August 2015*

**Ethel Francis, Principal of McIntosh Elementary, Newport News Public Schools:**

"I really loved having Mad Science of Hampton Roads working with our 5th graders... Our science scores improved from 55% to 71% in just one year! I would like to keep our partnership going for the upcoming 2016-17 school year." *August 2016*

