

During these unprecedented times, Liberty Science Center is more committed than ever to our mission of inspiring and preparing the next generation of scientists and engineers. As educators and students across the world adjust to remote learning, LSC is offering free of charge a suite of high-quality, accessible, live programming.

To meet the needs of educators who want access to no-cost programs for students and themselves, LSC has developed this schedule of free virtual programming. Each week school groups and educators can participate in programs daily using the links below. They can also conduct experiments, explore the world of LSC's animals, and find amazing movies anytime on *LSC in the House* (LSC.org/lscinthehouse).

Private courses are available for a fee. Contact us today to learn more about how LSC can customize our offerings to provide a more in-depth and interactive virtual experience for your students.

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GRADES PRE-K-2

4/27/2020

11:30 AM

FLOWER POWER

Spring is here, and flowers are finally beginning to bloom again. But how do they get the water they need to grow? Watch our experiment and even try to replicate it at home using common materials.



No registration required. Streaming live to the public on fb.com/libertysciencecenter

4/29/2020

11:00 AM

SUPER STRONG SHAPES

Which shapes are not only strong but... super strong? In this hands-on exploration, we'll use simple materials from home to build and test our favorite three-dimensional shapes.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJlqf-mvqz8vHNEwTzEPB5alifjpBr3zMflS

5/1/2020

11:00 AM

WONDERS OF THE NIGHT SKY

Tour this month's planets, stars and supermoon and ask an LSC educator all your questions.



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https://fieldtripzoom.zoom.us/meeting/register/tJUrd-CvqDkjHNaOXgbmpLuhpBIRyvKXajha

5/4/2020

11:30 AM

SHOOTING HOOPS WITH UNCLE ISAAC

What does basketball have to do with physics? Join us as we create a model to see forces in action.





11:00 AM

MR. KENGO'S MAPLE SEED MODELS

Create your very own maple seed model out of paper, and explore how the maple seed has a special way of getting the space it needs to grow and survive.

20 - 30 Minutes

Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJAufuCtpzsqH9A3WbEpQlaV5nwjEeP1AYfA

5/8/2020

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5/11/2020

11:30 AM

POLLINATORS: HONEY BEES

Have you thanked a bee today? Pollinators provide an essential service to the ecosystem. At least a third of the world's agricultural crops depends on pollination provided by insects and other animals. Honey bees produce and store honey, but they also help to make other favorite foods. We'll design a pollination device that works just as hard as a busy bee; students can replicate it at home using common materials.



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5/18/2020

11:30 AM

STEM STORYTIME: JESSICA'S X-RAY

Explore wonderful science topics through our live read-alouds of picture books. In *Jessica's X-Ray,* by Pat Zonta, Jessica breaks her arm and visits the hospital, where she finds out about the amazing medical machines that doctors use to see inside our bodies and help us.

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5/27/2020

11:00 AM

CAN YOU WALK ON WATER?

Explore states of matter as we play with a super-cool slimy substance. Is it a solid, liquid, gas, or... non-Newtonian fluid?



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJUtceitrz4rHdDpHp6YwNNoTsZdUNTHXXMN

6/1/2020

11:30 AM

SLIMY TIME

Investigate chemical and physical changes by learning how to make various types of slime.



No registration required. Streaming live to the public on fb.com/libertysciencecenter

6/3/2020

11:00 AM

FLOW MOTION

From puddles to clouds and rain to snow, water is changing its form around us all the time. Help us conduct different experiments to see evaporation, condensation, and precipitation right before our eyes.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJUtceGqrjwrG9S1y4_DPp6_mYwVdBDZAjyq





GRADES 3 - 5

4/29/2020

1:00 PM

SIMPLE MACHINES PART 2: CATAPULT

Discover how simple machines are used to make work easier. Students will learn the various types of simple machines and combine several of them to build a catapult.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJUofuqgqDgqHNaGmx7P3o_ljO4VPZrrgNvo

4/30/2020

1:00 PM

PLANETARIUM ONLINE: MAY NIGHT SKY PREVIEW

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5/5/2020

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3D PRINTED PROSTHETICS

See how 3D printing is changing the face of medicine. Engineers and physicians can customize prosthetics for the wearer, and almost anyone can print their own DIY assistive device at home.





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PLANETARIUM ONLINE: SUPERMOON!

Just before moonrise, find out about tonight's extra-close and bright supermoon.



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5/7/2020

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PLANETARIUM ONLINE: WHAT MAKES A PLANET: THE PLUTO STORY

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5/12/2020

1:00 PM

SHEEP HEART DISSECTION

Sheep have a four-chambered heart, just like humans. By studying the sheep's anatomy, you can learn how your own heart pumps blood through your body, thereby keeping you alive!



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5/14/2020

1:00 PM

PLANETARIUM ONLINE: STRUCTURE OF THE UNIVERSE

Fly through our solar system, our galaxy and beyond, all the way to the end of the known universe! 30 Minutes



5/15/2020

1:00 PM

ALL ABOUT STARS

How far away are stars? How small and how big? How hot do they get? And what fate awaits them?



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5/20/2020

1:00 PM

ORGANIZING FOSSILS

Our virtual classroom will let you see fossils up-close. We'll learn to observe them, determine their makeup, and organize them by the geologic time periods when different species lived.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJckc-mgqj0sGNwQDAGJ9Zb3oNOja74vmuXt

5/21/2020

1:00 PM

PLANETARIUM ONLINE: FIVE PLANETS SHOW

Five planets can sometimes be seen without a telescope, and this month, we have a rare chance to see them all in one night! We'll show you how to find Venus and elusive Mercury at dusk, and spot Saturn, Mars and Jupiter in the early morning.



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5/22/2020

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5/28/2020

1:00 PM

PLANETARIUM ONLINE: JUNE SKY TOUR

June has the shortest nights but some of the best weather for star-gazing. Explore the constellations and deep sky objects of the summer sky.



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6/3/2020

1:00 PM

FORCE AND MOTION

Become a scientist and use some unlikely tools to investigate the science behind Force and Motion.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJcsdOioqT4pH9wpwUchnZHljSrBbC_Clpsa





GRADES 6 - 8

4/30/2020

1:00 PM

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See how 3D printing is changing the face of medicine. Engineers and physicians can customize prosthetics for the wearer, and almost anyone can print their own DIY assistive device at home.



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5/6/2020

1:00 PM

MOVING MOLECULES

In an experiment with hot and cold substances, we show how molecules move differently depending on heat. Students can replicate the experiment at home.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJApfuyrrDotGtGkw7IOUKovH8HRjOxdDsQ8



5:00 PM

Planetarium Online: Supermoon!

Just before moonrise, find out about tonight's extra-close and bright supermoon.



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5/7/2020

1:00 PM

PLANETARIUM ONLINE: WHAT MAKES A PLANET: THE PLUTO STORY

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5/13/2020

1:00 PM

DIGITAL ART STUDIO

We explore an intuitive S.T.E.A.M. toolset that demonstrates how technology and art intersect. Explore color theory, lighting, and animation to create digital art or animation.



Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJYrc-mrrDsvH9fEbTvPrl4Ng0gR1ppPDP6R



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All About Bones

Why do we have bones? What are they made of? What happens when they break? Discover these answers and many more!



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5/26/2020

1:00 PM

ALL ABOUT BRAINS

How does your amazing brain actually work? See an LSC educator dissect a real sheep brain and learn how its structure is similar to that of a human brain.



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5/27/2020

1:00 PM

LIVING OR NOT?

Using state-of-the-art microscopic images, we'll discover the characteristics of living things, investigate different types of single-celled and multicellular organisms, and make arguments supported by evidence to determine whether something is living or nonliving.



20 - 30 Minutes

Advance registration required.

https://fieldtripzoom.zoom.us/meeting/register/tJUvfu-grTwrH9w8vtzfvVkQhv_EQMeV9mKg

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GRADES 9 - 12

4/28/2020

1:00 PM

CELEBRATE NATIONAL DONATE LIFE MONTH

We'll celebrate and discuss National Donate Life Month, which highlights the life-saving benefits of organ, eye and tissue donation.



No registration required. Streaming live to the public on fb.com/libertysciencecenter

4/30/2020

1:00 PM

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PROFESSIONAL DEVELOPMENT

4/30/2020

3:00 PM

ZOOMING INTO STEM LEARNING

How can educators adapt to the new online learning environment? Using a sample STEM lesson, we'll discuss effective learning and teaching strategies on the online platform Zoom.

Educators of Grades 3 - 8



30 Minutes

Advance registration required.

https://forms.gle/PLaKPevQPnBsEdRN7

5/7/2020

3:00 PM

ANALYZING AND INTERPRETING DATA

Explore what data entails and the many ways we interact with various types of data. Examine a STEM example and discover applications to learning and teaching in the science classroom.

Educators of Grades 3 - 8



30 Minutes

Advance registration required.

https://forms.gle/AbA3YfGTwErya9yv7

5/14/2020

3:00 PM

STEM IN OUR STORIES

How can teachers add STEM into a busy class day? Incorporate it into storytime. We explore hands-on activities about light and matter that go along with story books.

Educators of Pre-K - 2



30 Minutes

Advance registration required.

https://forms.gle/J3BV3sc7FW2c4Wgy6



5/21/2020

3:00 PM

REASONING IN EXPLANATIONS AND ARGUMENTS

Educators will explore the importance of scientific reasoning within the NGSS framework of Claim-Evidence-Reasoning (CER). Using a STEM example, we'll gather evidence and construct scientific explanations.

Educators of Grades 3 - 8



Advance registration required.

https://forms.gle/GgAdvLsjAHLcJVXCA

5/28/2020

3:00 PM

COMPUTATIONAL THINKING

Explore the major competencies in computational thinking (i.e., pattern recognition, decomposition, abstraction, and algorithms), experience hands-on STEM activities that support those domains, and purposefully incorporate computational thinking into existing lessons.

Educators of grades 3 - 8



Advance registration required.

https://forms.gle/krQFnmjVr1zhd6XV8

6/4/2020

3:00 PM

MORE STEM IN OUR STORIES

This workshop is a sequel to our STEM in our Stories professional development session. We'll continue exploring STEM experiments with a literacy connection, focusing particularly on activities in Earth & Space and Life Science.

Educators of grades Pre-K - 2



Advance registration required.

https://forms.gle/TQVTJtcZdtcFdafh9

