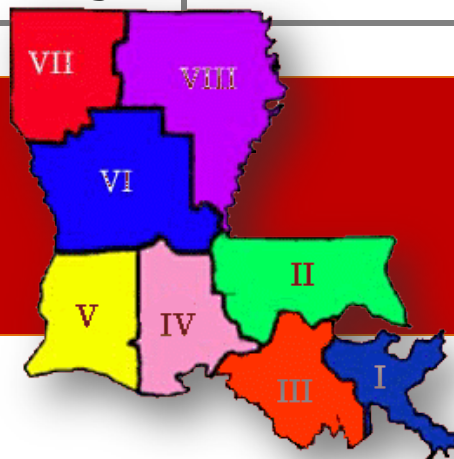


LSTA
NEWSLETTER

LASER




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LOUISIANA SCIENCE TEACHERS ASSOCIATION

Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.



LSTA Board and Regional Representatives

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<p>Kellie Boquet Region 4 Representative khboquet@lpssonline.com</p>	<p>Cammie Canik Region 5 Representative cammie_canik@camsch.org</p>	<p>Dr. Ladale Bernard Region 6 Representative ladale.bernard@rpsb.us</p>
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L O U I S I A N A S C I E N C E T E A C H E R S A S S O C I A T I O N

Louisiana science educators dedicated to the advancement of scientific literacy at all levels,
and encouraging lifelong learning.

President's Message from Pierre LaCaze



Our 2023 LSTA / LATM Math and Science Conference is quickly approaching. We are planning a phenomenal conference. We will have 130 sessions during 10 different time slots. Regardless of the content you teach, you will find sessions relevant to you. We will also feature over 65 exhibitors, who are willing to help you this pivotal year. The conference will take place November 2-3 at the Raising Cane's River Center in Baton Rouge. To register and for all other conference information, including a look at the presentation list, for the conference please visit <https://lsta.info/conference-registration>.



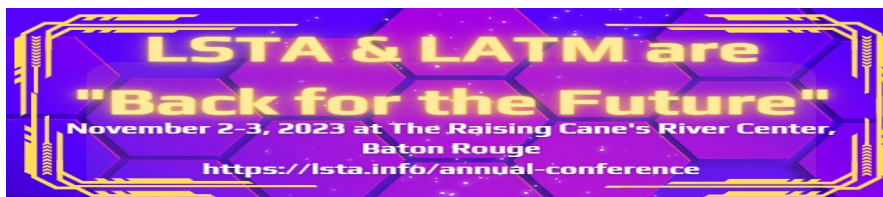
I and the LSTA Board are pleased NSTA President Julie Luft will be joining us in Baton Rouge for our conference. We would also like to extend an invitation to our LSTA / LATM Awards Program on November 2nd at the Louisiana Art and Science Museum. LASM is an amazing museum right across the street from the Raising Cane's Center. Stay around after for an LSTA meeting. This will be followed by a social sponsored by Curriculum Associates.

Stay on the lookout for emails regarding coffee talks. The monthly coffee talk series is an informal professional development where we gather for a cup of coffee over Zoom. It is a great opportunity to learn something new and meet others, while drinking from your favorite coffee mug.

It has truly been an honor to serve as President of Louisiana Science Teachers Association. It has been a privilege to work with science educators across the state over the past two years. Thank you for allowing me to give back to the subject I love.

Sincerely,

Pierre LaCaze
President, LSTA



Top 10 Reasons to Attend the 2023 Joint Conference

TOP 10 REASONS TO ATTEND THE 2023 LOUISIANA JOINT MATH SCIENCE CONFERENCE

- Attend inspiring educational sessions from leaders in math and science education
- Network with colleagues from around the state and exchange ideas
- Connect with formal and informal professionals to enrich your teaching practices
- Gather exciting information on instructional advances in materials and equipment in the exhibit hall
- Pick up Freebies to take back to colleagues and home
- Gain additional skills and techniques to implement in your classroom instruction
- Expand your professional growth
- Learn about grant and program opportunities
- Consider opportunities to take on leadership roles with the state's professional organizations
- Learn about the awards programs open to members of LATM and LSTA

<https://lsta.info/annual-conference>

The 2023-2024 PAEMST Cycle is Open



Call for Nominations

The Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) are the highest honors bestowed by the United States government specifically for K-12 science, technology, engineering, and/or mathematics teaching. Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of STEM education. Since 1983, more than 5,200 teachers have been recognized for their contributions to STEM education. Up to 110 teachers are recognized each year.

Presidential Awardees receive:

- A certificate signed by the President of the United States
- A trip to Washington, D.C. to attend a series of recognition events and professional development opportunities
- A \$10,000 award from the National Science Foundation
- Access to a network of award-winning teachers from across the country

Who Can Nominate?

Anyone—principals, teachers, parents, students, or members of the general public—may nominate exceptional science, technology, engineering, and/or mathematics teachers.

NOMINATION DEADLINE: January 8, 2024

Who Can Apply?

Elementary school science, technology, engineering, and/or mathematics teachers (K-6) can apply this year. Secondary school teachers (7-12) will be eligible to apply during a future cycle.

APPLICATION DEADLINE: February 6, 2024

To nominate or apply, visit www.paemst.nsf.gov

The National Science Foundation administers PAEMST on behalf of the White House Office of Science and Technology Policy.

BACK FOR THE FUTURE



NOVEMBER 2-3, 2023
LATM/LSTA CONFERENCE
IS COMING TO BATON ROUGE

CHECK OUR WEBSITE FOR
REGISTRATION & EXHIBITOR
INFORMATION
[HTTPS://LSTA.INFO/ANNUAL-
CONFERENCE](https://lsta.info/annual-conference)

✦ **Region I** ✦

[Tulane University's Center for K-12 STEM Education](#) is off to great start in the Fall 2023 semester! We are again excited



to offer on-campus programming for both teachers and students this school year. We hosted **90 boys and 12 teachers** at **[Boys at Tulane in STEM \(BATS\)](#)** on Saturday, September 16th. In addition to 100 Tulane faculty and student volunteers at BATS, community partner organizations including **NASA Stennis Space Center, Ochsner Medical Center, Kenner Planetarium, National Oceanic and Atmospheric Administration (NOAA), and National WW2 Museum. St. Mary's Dominican High School FIRST Tech Challenge team** also demonstrated and discussed their robots with the young students. Workshops included working with river and delta simulations, extracting DNA from strawberries, and an ecology and conservation escape room.

for 5th-7th grade students on **Saturday, November 4th** from Registration is now open. **[Sign up here to register your](#)**

Tulane will host **[STEM at Tulane](#)**



our fall **[Girls in \(GiST\)](#)** program **8am-3pm. [child for GiST!](#)**

Our GIST and BATS programs provide **fifth through students** with the opportunity to meet and work with graduate, faculty, and professional role models in STEM Workshops developed by faculty and student teams empower inquire, investigate, and discover in a positive environment. open the doors wide and welcome young students to careers by encouraging creative thinking, promoting self-esteem, and awareness of the opportunities in STEM that await them. Cost is only \$10 for all day STEM fun! These events would not be possible without the Center's sponsors: **Shell, The Joe W. and Dorothy Dorsett Brown Foundation, Entergy, and The Bruce J. Heim Foundation.**

seventh grade undergraduate, fields. students to Our goal is to in STEM fields increasing



Teachers of 3rd through 8th grade students can also participate in BATS and GiST! Thanks to the generosity of **Shell and The Joe W. and Dorothy Dorsett Brown Foundation**, we are pleased to be able to offer teachers the chance to participate in 3 unique workshops at each event that **align with the Louisiana Science Standards!** Participating teachers will get to experience the workshop hands on and discuss how to implement the activities and aligned standards into their classrooms. **Teachers will also receive a \$100 stipend, aligned curricula ideas, AND supplies to bring the activities back to their school!** Preference is given to teachers from majority free or reduced lunch schools. **Registration is still open for our November PD on Saturday, November 4th.** A \$20 refundable deposit is required to register.

[To sign up, please register online here.](#)

[MARK YOUR 2023 CALENDARS FOR OUR SPRING EVENTS:](#)

[Girls in STEM at Tulane \(GiST\) on Saturday, March 16th, 2024](#)

[Boys at Tulane in STEM \(BATS\) on Saturday April 13th, 2024](#)



<https://www.facebook.com/tu.k12.stem/>



https://www.instagram.com/tu_k12_stem/

Facebook @TU.K12.STEM | Instagram @TU_K12_STEM

**SAVE
THE
DATE**

20
THE CHALLENGE™
CELEBRATING 20 YEARS
**FUN, FREE STEM COMPETITION FOR
STUDENTS IN GRADES
5-81**

**REGISTRATION
OPENS
OCTOBER 2**

**WORK AS A TEAM TO COMPETE FOR
SCHOLARSHIPS FOR COLLEGE, TRADE
SCHOOL, OR CAREER
CERTIFICATIONS.**



**YOU
BE THE
CHEMIST**
CELEBRATING 20 YEARS

Louisiana Science Teachers Association Newsletter (www.lsta.info)

The Challenge is:

- Team-based (3-4 students), free, STEM competition for students in grades 5-8
- Teams compete in the in-person or the virtual Regional Challenge(s) answering timed multiple-choice and short-answer questions. Teams will also create a video exploring chemistry concepts in this year's theme.
- Regional Challenge and video scores are weighted to determine state winners and national finalists. National finalist teams will advance to the National Challenge in Houston, where they will build their passion for STEM, interact with leaders in the industry, and compete for scholarships!

Why should you participate in the Challenge?

- Participation can be used as an education tool for your classroom.
- Interactive Study Materials are available for your students once you register.
- Educator resources and guidelines are provided for you to use.
- Students can develop their interest in STEM and compete for scholarships!

You can view more information about the Challenge on our [FAQ page](#)



GET READY FOR A SPOOKTACULAR ADVENTURE!

**COMMUNITIES OF PRACTICE
HALLOWEEN
SCAVENGER HUNT**

with Ochsner Education Outreach!

Join us for a Halloween-themed Scavenger Hunt hosted by the Ochsner Education Outreach! Go on a quest for lab materials amidst shelves filled with tempting candy distractions.

Oh, and don't forget your costume!

It's a bewitching fusion of discovery and fun 🧪👻

Audience: Teachers (all grade levels)

**STEM LIBRARY LAB
3011 N I-10 SERVICE RD E
METAIRIE, LA 70002**

Thursday,
October 26th
4:30pm - 6pm

Ochsner
Education Outreach

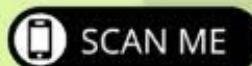
STEM LIBRARY LAB
UNIVERSITY OF LOUISIANA
AT MONROE

FREE HEALTH AND COOKING CLASS FOR KIDS

This unique cooking and STEM education program will help kids explore the relationship between nutrition, physical activity, and digestive anatomy and finish with a healthy cooking lesson and lunch.

Classes will be held on Saturdays from
9:15 am - 12:00 pm

Class Dates Available:
October 28th
November 11th



THIS CLASS IS FOR KIDS AGED 8 -12

ADVANCE REGISTRATION IS REQUIRED.
SIGN UP WITH THE QR CODE AND
WATCH FOR AN EMAIL WITH A
CONFIRMATION AND MORE
INFORMATION CLOSER TO THE EVENT.

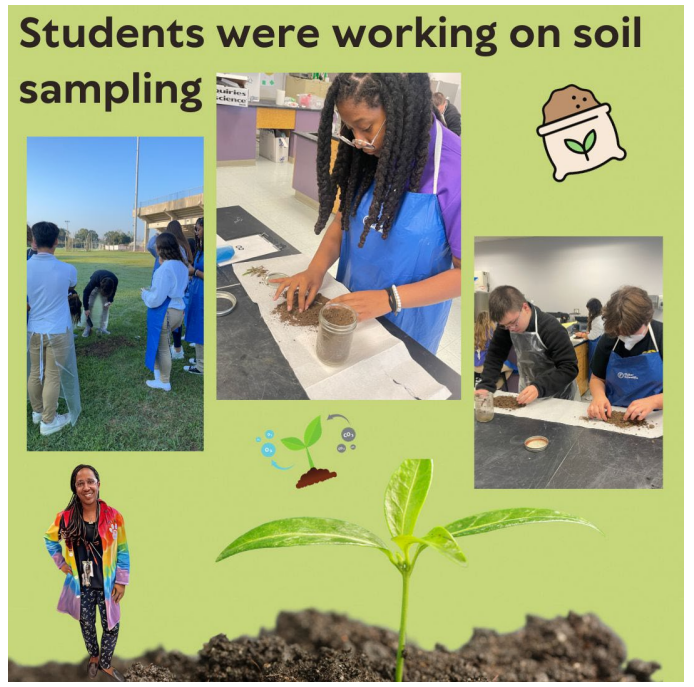
IF YOU HAVE ANY QUESTIONS, YOU
CAN REACH OUT TO CHEF HEATHER AT
TEACHINGKITCHEN@TULANE.EDU

Menu:

- Build Your Own English Muffin Pizzas
- Ranch & Hummus with Veggie Dippers
- Strawberry Banana Ice Cream

300 N. BROAD ST, STE 102
NEW ORLEANS, LA 70119





Hahnville High School AP Environmental Science students were conducting an outdoor lab on soil sampling. The students were trying to investigate what type of soil the school had on the property. The first phase of the investigation was to dig up some soil and then they took it back to the lab for further analysis.



Environmental Science students were learning about Albedo effect by conducting a lab investigation on how heat is absorbed on light and dark materials. Mrs. Gillam uses the Modern Classroom approach in her science class. You can see the students are at various stations working through personalized learning modules. The students were also conducting an experiment outside on a Closed Ecosystem. The students were studying how to sustain life on another planet!



Students at Hahnville High School always practice Lab Safety when conducting investigations. Remember safety must always come first in the lab!

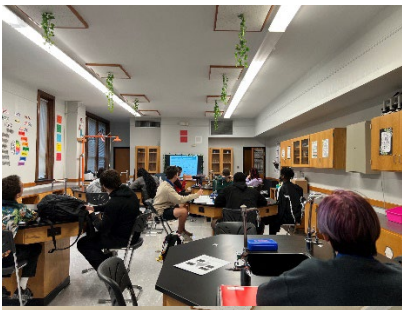
Please submit news for Region 1 to **Cecilia Gillam** at cgillam@stcharles.k12.la.us.

✦ Region II ✦

North Iberville High School and Iberville STEM Academy located in Rosedale has new and exciting science and health sciences courses and pathways this school year!

- One of our Agriscience classes got an early start on collecting insects to prepare for their entomology unit. Her students took a bite out of F.F.A. today by making a trail mix to learn about different opportunities available through the F.F.A. organization! Here are some pictures from the activities the Agriculture students completed today. They played Ag. Survivor and Where's Agriculture? These activities helped them explore the role of agriculture and how agriculture impacts our lives.
- Our Biology II students had an opportunity to apply content learned in the cell unit. They were allowed to choose between an animal or plant cell using the rubric provided. I also encouraged students to be innovating by using materials available at home. Any misconceptions will be addressed in class.
- Last week, our 8th grade students in Spanish and Agriculture teamed up to learn about Agritourism and La Tomatina, a festival in Spain famously known for its large Tomato Fight.
- In one of our Physical Science classes, many situations involve using dimensional analysis, such as cooking or baking. Dimensional analysis is a way of converting measurements into more common units using conversion factors. In this activity, we used dimensional analysis to convert measurements into a recipe for making fudge.
- In Physics, students read about the function of ground wires and circuit breakers. We developed models to show how a system transfers electrical energy through multiple circuits and used it to explain how electrical energy transfers within a building and to multiple buildings in a community. Here, students are dissecting power strips and connecting it to a battery to power multiple devices.

Louisiana Science Teachers Association Newsletter (www.lsta.info)



New teachers in St. Tammany attended a two-day induction in July. Science teachers engaged in the 'Let's Roll Lab' to explore how motion and transfer of energy could be used to not only represent LS standards, but also PS and ESS standards.



Louisiana Science Olympiad is back to "in person" events for the 2022-2023 school year. Here are some of the important dates.

<u>Registration opens</u>	<u>9/1/2022</u>
Rules released from Nationals	9/6/2022
New Coaches workshop in person at Southeastern	10/22/2022
Last day to register a team	1/27/2023 by 5 pm
State Competition at Southeastern Louisiana University	4/1/2023
State Director: Bruce Sherman	bruce.sherman@selu.edu

If you want more information about the Science Olympiad, check out the Nationals website at soinc.org. The state website is <https://scilympiad.com/la>

Louisiana Science Teachers Association Newsletter (www.lsta.info)

4th grade students at Bayou Lacombe Middle School in St. Tammany Parish have been studying the ways the Earth changes. Here they discovered the impact of glaciers and how deltas are formed.



St. Tammany Parish Public School teachers kicked off their Adopt-a-Pond/Park Program with a teacher professional development workshop. Teachers learned about conducting water quality measurements, aquatic invertebrates, wetland plants, and local marsh restoration projects. These skills will help participating teachers guide students attending 11 St. Tammany Parish Schools in understanding storm water retention, and pollution reduction. STP Government plants trees in storm water ponds to reduce pollution in local waterways. Additionally, LSU Researchers took the teachers on an airboat ride to visit a local marsh restoration site in Big Branch US Fish and Wildlife Refuge. The education effort is a partnership between St. Tammany Parish Government, STPP School System, LSU AgCenter, STP Mosquito Abatement, and Louisiana Sea Grant College Program.

Photo 1 Training: A Big Branch Marsh Agent and Louisiana Sea Grant College Program Agent shows teachers the location of the wetland restoration projects they will be visiting on the air boat marsh tour.

Photo 2 Marsh Tour: Air boats were used to transport teachers through Bayou Liberty and Bayou Bonfouca to tour the Big Branch Marsh wetland restoration sites.

Photo 3 Core Sample: Teachers and Louisiana Sea Grant College Program Agents take core samples of a natural marsh to analyze the sediment vs vegetation amounts in the soil.

Photo 4 Invertebrate: The St. Tammany Parish Government Mosquito Abatement trained teachers to identify aquatic and land invertebrates.





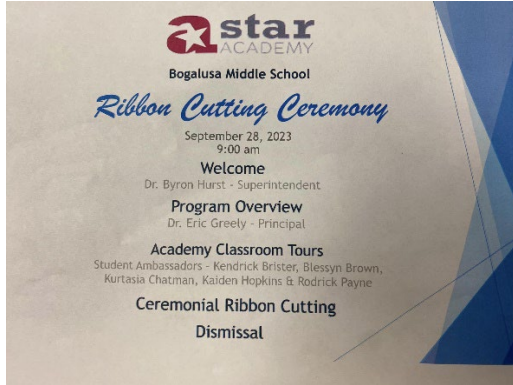
First grade students at Sixth Ward Elementary in Pearl River are really enjoying their first unit in science, Animal and Plant Defenses! They are learning that both animals and plants have structures that help them do what they need to do to survive. Students read a book called Tortoise Parts and discussed how a tortoise uses different structures to do different things. One of their teachers brought in her two tortoises, Tortellini and Shellington, for a classroom visit! Students got to observe the tortoises using their structures to bite, reach up, and stay safe. They loved it!



A ribbon cutting was recently held on the Bogalusa High School campus for STAR Academy. This method of learning, being implemented in their middle school classrooms, uses a hands-on, project-based, STEM-inspired model to re-engage learners, advancing them up to two grade levels in a single year. Star Academy also exposes students to employment possibilities, relating their learning to potential careers so they understand its relevance to their success in life.

Visitors and invited guests were able to enjoy a light breakfast, network, and learn more about this program. They then moved into the classrooms so they could see STAR Academy in action.

Louisiana Science Teachers Association Newsletter (www.lsta.info)



The Wartburg College in Iowa donated a hydroponics system to Jennifer Simon's Biology II and Dual Enrollment Biology classroom at Slidell High. It is for plants that is self-sustaining with the help of the fish. Her students have been analyzing the relationship between cell respiration and photosynthesis using this model. They will also do experiments with it when they get to Ecology.

Amy Price's First graders at Riverside Elementary School were proud to model their aprons while studying the organs of the human body.



Connecting with young patients at OLOL Children's Hospital virtually while facilitating hands- on science activities in the Playroom . The delivery of individual supply kits enabled children to participate in their rooms through a live video feed while also engaging by text and phone with BASF and LASM staff.

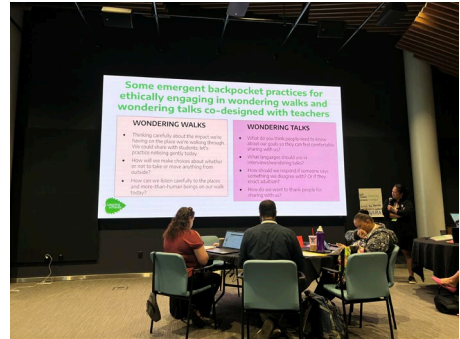
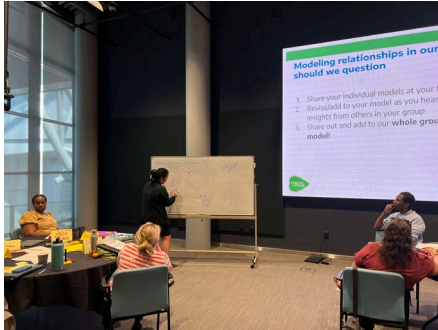


Please submit news for Region 2 to Tricia Trinco at trish.trinco@gmail.com.

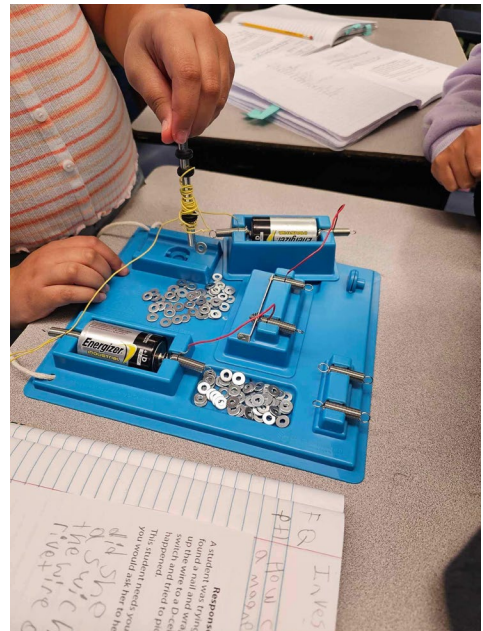
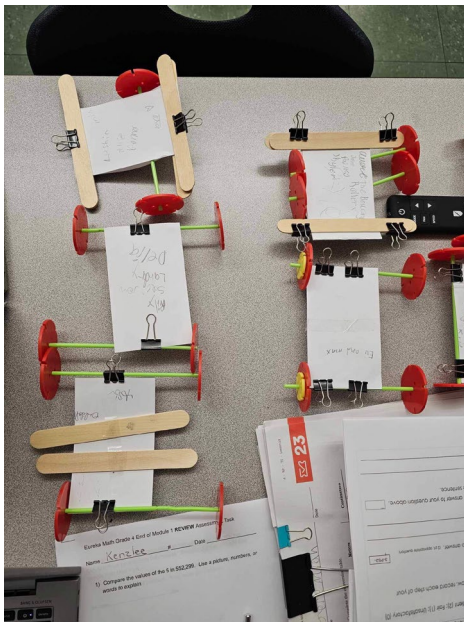
Louisiana Science Teachers Association Newsletter (www.lsta.info)

✦ Region III ✦

Learning in Places Project September 25-26 at the WWII museum in New Orleans. Teachers from Region III attended the professional development as part of a year long project



At Bayou Black Elementary students in Mrs.Rebecca Shaneyfelt's 3rd and 4th grade science classes built electromagnets and carts as part of her science lesson.



Please submit news for Region 3 to **Wendy Delgado** at wendy_delgado@houmachristianschool.com.

✦ Region IV ✦

[Check out the latest news for the Region 4 STEM Network Center](#)

Please submit news for Region 4 to **Kellie Boquet** at khboquet@lpssonline.com.

✦ Region V ✦

Please submit news for Region 5 to **Cammie Canik** at cammie_canik@camsch.org.

✦ Region VI ✦

Please submit news for Region 6 to **Dr. Ladale Bernard** at ladale.bernard@rpsb.us.

✦ Region VII ✦



Jan Graff, LSTA Awards Chair, was recently honored by the National Science Foundation for her years of service as the Louisiana State Coordinator for the Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST). Jan has done an outstanding job handling the LSTA Awards along with the PAEMST for about 20 years, Thanks Jan for your outstanding service. The award presentation was made during the State Coordinator meeting in Alexandria, VA.



We are Region 7

The Northwest LaSTEM Innovation Center is the working name for Region 7. It is housed at Sci-Port Discovery Center and includes 10 Parishes: Bienville, Bossier, Caddo, Claiborne, De Soto, Lincoln, Natchitoches, Red River, Sabine, and Webster. Dr. Heather Kleiner is the Director.

SCI-PORT DISCOVERY CENTER

Goals and Purpose

There are multiple goals of LaSTEM both statewide and within each region. The overarching goal is to connect education to employment. The passionate stakeholders of the North Louisiana STEAM Alliance are the grassroots, roll up your sleeves, boots on the ground, working parts of the region. They work hand-in-hand with LaSTEM.

Visit the website for resources nlasteamalliance.org



A 92,000-sq.-ft. complex with interactive science exhibits, a planetarium & an IMAX dome theater located at 820 Clyde Fant Pkwy, Shreveport, LA 71101.

Sci-Port offers admissions assistance to Caddo Parish schools through ACT447.

Provide free door admission, including access to special programs, events & exhibits, on-site camps, and educational IMAX movie admissions to students, teachers, chaperones/parents/caregivers and individuals

desiring to attend the center but without financial assistance would not be able to do so.

How to apply: contact Reservations@sciport.org to make your reservation, set date, select programs. Click box that you need admissions assistance (and that you qualify). Complete the pre-populated form and follow directions, submit to Dr. Heather Kleiner at grants@sciport.org for review. Funds are limited and are used on a first-come, first-serve basis. End date: May 31, 2024 or until funds run out.



601 Clyde Fant Parkway
Shreveport, Louisiana 71101
318-383-0601
info@shreveportaquarium.com

Plan Your Adventure

With over 300 species and 1,000 animals, guests can get up close and personal with sharks, seahorses, turtles, eels and many other amazing sea creatures and reptiles. Guests are able to hand-feed the stingrays, touch the moon jellies, sea stars, anemones and more, and learn all about how these amazing animals adapt and survive in their environment.

Our mission is to create thoughtful, impactful and sometimes unexpected interactions and experiences that inspire the protection of the aquatic world both close to home and far away.

Our friendly staff are always on the floor, helping guests get the most of their visit and we firmly believe in accessibility for all. Our goal is to create a warm and welcoming atmosphere where everyone's unique differences are accepted, respected, valued and appreciated. We go above and beyond to ensure that each and every guest has a memorable experience.

FALL PROMO

Teachers, book your fieldtrip for 20+ kids with us from now thru Nov. 17 and get this FREE axolotl classroom adoption kit for your class! (Field trip must occur before Nov 17).

The kit includes an axolotl plush toy for your classroom, and a fun fact sheet and photo for all of your students! (While supplies last)

Also each child will receive a free child guest pass to come back to the aquarium on a future date (with a paying adult) through the end of year.





WOW! **NORTHWEST LOUISIANA**
YOUTH SUMMIT
2023!

LOUISIANA DEPARTMENT OF HEALTH
Public Health

SATURDAY, NOVEMBER 4

REGISTRATION & BREAKFAST: 8:30 a.m.
PROGRAM: 9 a.m. to 12:30 p.m.

SOUTHERN HILLS PARK & COMMUNITY CENTER
1002 W. Bert Kouns Industrial Loop, Shreveport

Youth ages 10-18 & parents too!

FREE

Topics covered:

- Cyber bullying
- Dating etiquette & trafficking
- Police engagement
- Substance use disorder

Motivational speaker: Britney Green, KeyPoint Leadership

Grand door prizes: 2 mountain bikes
Other door prizes throughout

Info or questions? Contact
yolanda.duckworth@la.gov

Register here or at
<https://arcs.la.gov/0z0>

MOTIVATIONAL LUNCHEON SPONSOR: 

MOTIVATIONAL LUNCHEON SPEAKER:  

BREAKFAST SPONSOR:  **Step Forward**
An initiative of Community Foundations of North Louisiana

GRAND DOOR PRIZE SPONSOR:  

THANK YOU TO OUR SPONSORS! 

Please submit news for Region 7 to **Rosie Cash-Loftis** at rbcash@caddoschools.org

✦ Region VIII ✦

Cathi Cox-Boniol and **Missy Wooley** (both SCILS Region 8 LaSTEM Center at Louisiana Tech University) hosted the final STEM Camp of the summer with its Environmental Extravaganza week. Both went on to facilitate middle grades OpenSciEd training for teachers in Lafourche and Iberia Parish. In addition, they completed several sessions of content training for Lafourche Parish as well as a session on meeting the needs of diverse learners for Ouachita Parish. Cathi and **Dr. Lindsey Keith-Vincent** (Louisiana Tech University College of Education and Human Sciences) traveled to Chalmette or the 3rd Quarter LaSTEM Council Meeting before Cathi and Missy participated in a Virtual Elementary OpenSciEd training as they continue their facilitation of the Louisiana pilot. Cathi made a SCILS presentation to the Quota Club of West Monroe before joining the LACAL (Louisiana Center for Afterschool Learning) Advisory Council retreat in Baton Rouge. Cathi was also elected Secretary of the ITEEA (International Technology and Engineering Teachers Association) Council for STEM Leadership, attended You Be the Chemist Challenge training and judged QSM grants for the state. Cathi and Missy welcomed middle grades students from A. E. Phillips, Choudrant High, Ruston Junior High School, Caldwell High, Neville Junior High, and Tensas Academy schools as SCILS kicked off its CS4U (Computer Science for You) program in partnership with LA Tech's **Dr. Lisa Dick**, **Chris Campbell** and **Diane Madden**. While Missy and Diane began support for schools and districts implementing the high school OpenSciEd curriculum, the team hosted Mission2Mars training for area community stakeholders and Cathi was part of the program presented at the DOE and LACAL Fall Training held in Baton Rouge where she shared information about the SCILS outreach with STEM kits during the Louisiana Peach Festival. Congratulations to Lindsey who was recognized by the Lincoln Parish Journal as one of its nominees for the 2023 Rising Lincoln Leader Award as well as Cathi and Missy who received notification of three grant awards—two Lagniappe Ladies grants totaling close to \$10,000 and a DRAX Community Grant for another \$7000. The grant funding will provide additional technology for the SCILS team outreach.



Environmental Extravaganza



Lafourche Parish Training

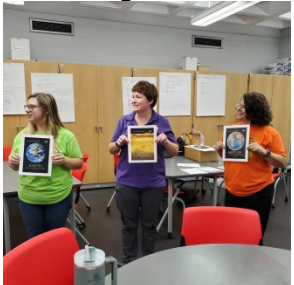


Iberia Training

Louisiana Science Teachers Association Newsletter (www.lsta.info)



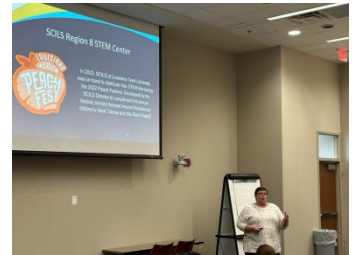
CS4U Program



Mission2Mars Training



Quota Club Presentation



21st Century Presentation



Please submit news for Region 8 to **Marci Bryant** at marcibryant@opsb.net.



Professional Development Opportunities and Resources

Louisiana Association of Science Leaders' Corner

Are you a district science supervisor, science content specialist, science master teacher, Teacher Leader or science coach? If so, consider becoming a member of LASL, the affiliate of the National Science Education Leadership Association (NSELA). We hope to see a number of science education leaders present and participate in the Joint LATM LSTA Conference in Baton Rouge November 2/3.

Some important and timely science education resources.

["Educating for Sustainable Development: Perspectives of U.S. and Global Educators."](#)

In the spring of 2023, the Smithsonian Science Education Center in collaboration with Gallup Inc., conducted a survey to gauge 2,580 teachers' and school administrators' attitudes toward, and demand for, education related to sustainable development.

The findings in this report indicate that U.S. educators are hungry for support and resources to teach about Sustainable Development.

You can find the full report here:

[Educating for Sustainable Development: Perspectives of U.S. and Global Educators Report](#)

NextGenScience

Looking for materials to support today's science standards? High-quality science instructional materials are a [necessary component](#) of the successful transition to today's science standards. [NextGenScience](#), a project at WestEd, works with a cadre of highly trained expert educators to review and provide independent, third party feedback to developers to improve the materials. When materials are highly rated, they are shared as [Quality Examples of NGSS Design](#) on nextgenscience.org, and are linked off of each corresponding standards page. Materials with the top rating also earn the [NGSS Design Badge](#). For more information, contact nextgenscience@wested.org.



Sea Change Podcast

NASEM announced a new podcast from WWNO/WRKF that will dive deep into the environmental issues facing coastal communities on the Gulf Coast and beyond. The podcast will help document our changing coasts while sharing captivating stories from the people dealing with the most significant and complex problems of our time.

Hosted by Carlyle Calhoun, Halle Parker and Kezia Setyawan, the show is based out of New Orleans, Louisiana which — perhaps more than any other place — embodies the existential threat of climate change. But like the city known as the Big Easy — Sea Change will also showcase joy, and resiliency — and tell powerful stories of people making a difference.

<https://mail.yahoo.com/d/folders/1/messages/373172?.intl=us&.partner=sbc&.lang=en-US#:~:text=making%20a%20difference.-,Listen%20now.,-Made%20possible%20with>

Louisiana Science Teachers Association Newsletter (www.lsta.info)

Made possible with major support provided by the Gulf Research Program of the National Academy of Sciences, Engineering and Medicine.

Congressional App Challenge

The 2023 Congressional App Challenge invites middle and high school students to actively engage in computer science and coding innovation. The deadline to apply is Nov. 1 at 12 pm EST. For more information and to apply go to their website at <https://www.congressionalappchallenge.us/>



2024 Louisiana Envirothon

Let's do it again!!! Join us for the 2024 Louisiana Envirothon! After a very successful 2023 competition year with many new teams experiencing Envirothon and Louisiana placing 11th in the nation, we are hoping to do it again! Teams start preparing now! Registration links are below.



What is Envirothon?

The Louisiana Envirothon is an environmental problem-solving competition for students in grades 6-12. Teams train and compete by demonstrating their knowledge of environmental science and natural resource management with the hope of going on to represent Louisiana at the North American Envirothon Competition. The competition focuses on five natural resource areas: soils and land use, aquatic resources, forestry, wildlife, and a current environmental issue. This year's competition will be held on Wednesday, March 6, 2024.

Teams also present a solution to an environmental problem related to the current issue through an oral presentation. The 2024 current environmental issue is Renewable Energy for a Sustainable Future. Training information and study materials are already available online. Additionally, training sessions will be available at the beginning of the year.

Why Get Involved With Envirothon?

Winners receive special recognition and monetary prizes.

It's fun! Students gain a desire to learn more about the natural environment and stewardship of natural resources.

Students also learn critical thinking, cooperative problem-solving and decision-making skills.

Students learn how to apply resource management and ecology to complex environmental issues with hands-on environmental experiences.

The winning high school team (meeting minimum score requirements) may represent Louisiana in the NCF Envirothon competition where students can win scholarships and prizes.

How Can You Get Involved?

LEAD: You can get involved with Louisiana Envirothon by organizing a team of five students from the same school or associated with an organized group (i.e. FFA, 4-H, science club, etc.). The team registration fee is \$50. Register ONLINE today! Travel assistance is available for long-distance teams. The registration deadline is 11/3/2023. A new advisor guide is available to help prepare teams.

ADVOCATE: Share information! Please share this email with any teachers or groups you think may be interested! Follow us on Facebook and share the opportunity via social media. Envirothon is an exceptional opportunity for our youth to get hands-on experience in environmental problem-solving...help us spread the word!

SPONSOR: Become a Sponsor! Envirothon would not be possible without our wonderful sponsors. Sponsors receive recognition on competition posters, promotional items, DEQ website, social media and through press releases.

Email laenvirothon@gmail.com to schedule an Envirothon information session today. All new registrants will be required to participate in our virtual orientations that will be scheduled.

For more information please contact us or visit the Envirothon website at www.deq.louisiana.gov/envirothon

Louisiana Science Teachers Association Newsletter (www.lsta.info)

EPA Seeks Applicants for 2023 Environmental Education Grants

EPA will award grants in each of EPA's 10 Regions, between \$50,000-\$100,000 each, for a total of 30-40 grants nationwide. The program includes support for projects that reflect the intersection of environmental issues with climate change adaptation and mitigation strategies, preventing future water quality and human health issues, in addition to other environmental topics.

Funded projects will increase public awareness of those topics and help participants to develop the skills needed to make informed decisions. Each of the 10 EPA Regions published a solicitation notice with their respective regional details. Applicants must apply to the Regional NOFO that corresponds with the location of their proposed project. Through this grant program, EPA intends to provide financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques, that will serve to increase environmental literacy and encourage behavior that will benefit the environment in local communities, especially underserved communities. This grant program recognizes underserved communities as high-poverty areas, persistent poverty counties, communities the Council on Environmental Quality's Climate and Economic Justice Screening Tool identifies as disadvantaged communities, and Title I schools.

Visit the new [EPA Grants Community Library of Frequently Asked Questions \(FAQ\)](#) and the [EE grant FAQ](#) webpages to learn more about the current competition and the federal grant process. Find out background information on the EE Grants Program and resources for applicants on EPA's [EE Grant Homepage](#).

Applications are due on November 8, 2023, and the Notice of Funding Opportunities are now posted on www.grants.gov and the [EE Grant Solicitation Notice webpage](#).

The Office of Environmental Education will also host at least one webinar during the open solicitation period on how to write a competitive application and to address commonly asked questions. Once confirmed, webinar registration details will be available on <https://www.epa.gov/education/grants#webinar>. Stay up to date on all EE grant information, including announcements related to upcoming webinar registration, by subscribing to the [EE Grants Listserv](#).

BACK FOR THE FUTURE!

November 2-3, 2023
LATM/LSTA Conference
Raising Cane's River Center, Baton Rouge

The River Dynamics Experience



ABOUT THE PROGRAM

The **Louisiana Art & Science Museum (LASM)** is partnering with the **Coastal Protection and Restoration Authority (CPRA)** to offer *The River Dynamics Experience* to students in **grades 4-12**. With funding generously provided by CPRA, this innovative, learning opportunity is available **free-of-charge** on a first-come, first-served basis.



This exciting educational program includes a visit to the **LSU Center for River Studies (100 Terrace Ave, 70802)** and same-day, hands-on classes and activities at **LASM (100 S. River Rd., 70802)**.

On their tour of the LSU Center for River Studies, your students will explore a 3D model of the lower 180 miles of the Mississippi River, which is one of the most technologically-advanced river models in the world.

At LASM, students will investigate solutions to real-world environmental challenges by engaging with a state-of-the-art stream table. Participants will also view a related large-screen educational movie at LASM. Activities are aligned with the **Louisiana Student Standards for Science**.

HOW TO REGISTER

Please register as soon as possible since space is limited. Just scan the QR code below or access the online registration form at **tinyurl.com/RiverDynamicsExperience**.

This program is hosted at **two separate locations in downtown Baton Rouge**, so please provide your earliest arrival and latest departure times.

Feel free to email **educators@lasm.org** for more information.

**SCAN FOR
ONLINE
REGISTRATION**



We look forward to partnering with you to provide this exciting learning experience for your students! By inspiring students to think critically and respond constructively to environmental concerns, we are nurturing an educated 21st-century workforce that will carry the torch for future success and sustainability.



Practice Brief: Think Globally, Act Locally

This new STEM Teaching Tool provides guidance on how the United Nations' [17 Sustainable Development Goals \(SDGs\)](#) — global goals to make the world a better place for all — can be used to focus science instruction on meaningful local and global phenomena.

See STEM Teaching Tool Practice Brief 93 [here](#).



Wild Ones Lorrie Otto Seeds for Education Program

Grants ranging from \$100 to \$500 are available to support acquiring native plants and seeds for outdoor learning areas that engage youth in planning, planting, and caring for native plant gardens. Examples include pollinator gardens, rain gardens, tallgrass prairies, native plant monarch waystations, and sensory and natural playgrounds.

The 2024 Planting Season application window is July 14 through November 14, 2023. [Lorrie Otto Seeds for Education Program - Wild Ones: Native Plants, Natural Landscapes](#)

New Water Cycle Diagram for Educators and Students

The U.S. Geological Survey is thrilled to [announce](#) the recent release of a new water cycle diagram in English and Spanish. The new diagram is user-friendly, visually appealing, and scientifically accurate. It places necessary and accurate emphasis on human presence on the landscape and human influence on the water cycle.

Water Cycle Educational Resources from the U.S. Geological Survey:

1. **Explore** the diagram in more detail on our [zoomable website](#) in English or Spanish.
2. **Download** the diagram as a 26x36-inch pdf ([English](#) | [Spanish](#)), 8.5x11-inch pdf ([English](#) | [Spanish](#)), or fill-in-the-blank worksheet ([English](#) | [Spanish](#)).
3. **Compare** the relative sizes global pools and fluxes of water with our [interactive data visualization](#).
4. **Learn** more about the water cycle (and other water topics) on the [USGS Water Science School website](#).

Educators played an important role in the development of the new diagram. More than 100 educators spoke to us and provided us helpful feedback. Thank you! This was made possible because educators like you were willing to participate in [user-centered design](#).

Kenner Planetarium



November/December

11 A.M.

ONE WORLD ONE SKY

Join Big Bird, Elmo and their friend from China, Hu Hu Zhu as they locate the Big Dipper, the North Star and the moon in the night sky.



12 P.M.

NINE PLANETS AND COUNTING

How many planets are in our solar system? We'll examine each planet individually then look at the big picture. What is a planet anyway? The answer may surprise you.



1 P.M.

DREAM TO FLY

Learn how generations of dreamers pursued the ancient impulse that has taken us from the ground to the stars.



2 P.M.

SEASON OF LIGHT

Learn the history behind many of our holiday traditions and explore the sky at the time of Jesus' birth in this heartwarming planetarium show.



3 P.M.

LASER HOLIDAYS

Frosty, Rudolph and other holiday favorites are brought to life through laser lights and music. Hear classics from Nat King Cole to the modern melodies of Mariah Carey.



Adults - \$6.00 Children/Seniors \$5.00

Teacher PD Opportunity

2024 KNOWLES TEACHING FELLOWSHIP APPLICATION PROCESS

To be eligible for a 2024 Knowles Teaching Fellowship, individuals must:

1. have the capacity and determination to **commit to teaching as their primary career**;
2. have **earned a degree in a major related** to the mathematics or science discipline they intend to teach **between 2014 and September 1, 2024**;
3. have **earned or will earn a valid state teaching credential/ certificate/license** that enables them to **teach mathematics or science in grades 9–12 in the United States no earlier than January 1, 2019 and no later than September 1, 2024**; and
4. be **entering their first, second or third** year as teacher-of-record** during the 2024–2025 academic year.

Contact us via email at apply@knowlesteachers.org if you have any questions.



APPLY NOW



www.knowlesteachers.org



Discover EIF

[Discover EiE® Lessons Powered by Pear Deck™](#)

As part of a new collaboration, EiE with Pear Deck has transformed 10 climate change lessons into engaging, interactive, slide-show style lessons that support educators in introducing the critical topic of climate change to students in grades 3-8. Each presentation includes standards-aligned lesson plans, formative assessments, real-world examples and videos, enhanced with the interactive features of Pear Deck. [Get Started for Free Today!](#)

Climate Emergency: Feedback Loops Documentary Series

[Climate Emergency: Feedback Loops Documentary Series](#)

Teach climate change with the following free resources: Climate Emergency: Feedback Loops, a series of five short films narrated by Richard Gere, featuring twelve renowned climate scientists, and endorsed by the Dalai Lama and Greta Thunberg. The resources also include an accompanying science standards-based curriculum for grades 6-12 and discussion guides suitable for university level and community groups. The materials are freely available for use by teachers and students at www.feedbackloopsclimate.com. Ranging in length from 8 – 14 minutes, the films are ideal for classroom use. The broadcast version, Earth Emergency, aired on PBS and is now appearing on television globally. It was presented at the 2021 United Nations Climate Change Conference (COP26), showcased to the U.K. House of Commons, and featured in a series of webinars by the Smithsonian National Museum of Natural History.

Explorer Classroom Returns for 2023

Ignite an Explorer Mindset in your students with a [live interactive session](#) that connects young people with real National Geographic Explorers.

Our live interactive YouTube show will connect your students with scientists and storytellers to hear behind-the-scenes stories about their work and ask questions in real time. Upcoming topics include geography, biology, oceans, history, and more. All sessions are free and include an instructional guide to help your class get the most out of the experience.

We provide the following schedule for grades K-8:

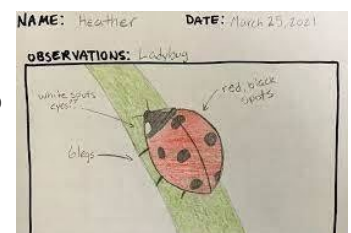
- **Every Monday, 11 AM ET** – Ages 4-8 | Grade K-2 | 30 minutes
- **Every Thursday, 10 AM & 2 PM ET** – Ages 9-14 | Grade 3-8 | 45 minutes

[Explore upcoming sessions](#) and register today. We are excited to see you there!

Digital Field Book Activity from the Smithsonian

https://naturalhistory.si.edu/education/teaching-resources/life-science/field-book-activity-making-and-recording-observations?utm_medium=email&utm_source=GovDelivery

This activity from the Smithsonian's National Museum of Natural History helps K–8 students practice the skill of recording observations. The activity includes a digital field book template to use or copy, as well as additional information about the evolution of the use of field books in science and tips for maximizing students' observation skills in the field. For example, teachers can jump start students' thinking with the activity's provided Guiding Questions to Encourage Observations and Discussion.



Children & Nature Network Vitamin N Challenge

The Vitamin N Challenge was inspired by Richard Louv's book on Vitamin N that includes 500 practical ideas to leading a nature-rich life. Join the challenge to help youth on summer break spend time outdoors.

NASA Citizen Science Projects: Calling learners of all ages to engage with NASA science!

Want to work on some real NASA science? NASA's citizen science projects are collaborations between scientists and interested members of the public. Through these collaborations, volunteers (known as citizen scientists) have helped make thousands of important scientific discoveries. There are more than 25 ongoing projects that need your help! NASA citizen science projects are open to everyone around the world, not limited to U.S. citizens or residents. Find a project! https://science.nasa.gov/citizenscience?fbclid=IwAR0nLySqaKaZHha78lbE6Z8PnOAaCxArQIKVNxnYykRUO5Hy9f2AIWwZ_7Y

EcoRise Opportunities, Events, and Resources

All Louisiana K-12 teachers have access to our leading-edge [Sustainable Intelligence Program](#), which includes sustainability and design curriculum, as well as grant funds (**up to \$700 per project**) for green student projects, and year-round training and support.

Green Guardians Environmental Literacy Curriculum

https://www.greenguardians.com/?utm_medium=email&utm_source=GovDelivery
[Green Guardians](#), a California-based educational technology company, has developed an [environmental literacy curriculum](#) for grades K–5. The curriculum consists of a series of multimedia lessons and games exploring topics such as pollution, climate change, sustainability, energy, watersheds, waste management, and environmental justice. The lessons use a story base to engage students in learning about their environment, and through inquiry and problem-solving, devise solutions to the problems they study



Lessons on Climate Change, Evolution and Nature of Science

The National Center for Science Education is celebrating its 40th anniversary of providing [classroom resources](#) created and tested by teachers from around the United States. View this comprehensive teacher tested set of lessons on Climate Change, Evolution and Nature of Science.



Coloring the Universe at LIGO

FREE Teacher workshop
Sat. January 13, 2024,
9:30 am - 3:30 pm CST
LIGO Science Education Center, Livingston, LA

Sponsored by [Vera C. Rubin Observatory](#), and the [Laser Interferometer Gravitational Wave Observatory](#), with support from the [National Earth Science Teachers Association](#) and the [Louisiana Science Teachers Association](#). Made possible by funding from the National Science Foundation.

Rubin Observatory has developed free, classroom-tested [online investigations](#) that enable students to explore real data using interactive visualization and analysis tools. The investigations are suitable for use with students from advanced middle school through introductory college levels and cover topics commonly taught in introductory astronomy classes or units. They require only a computer with access to the internet.

This workshop will cover how to access and teach all of the components of our new Coloring the Universe investigation from an NGSS perspective. The investigation incorporates the topics of electromagnetic radiation (light as waves), digital image processing, and using filters and color to communicate some properties of stars and galaxies. We will begin with a phenomenon and then work through the online investigation while modeling some assessment tools and strategies.

During the second part of the workshop, we will explore the Rubin Voices Trading Cards Activity, which introduces students to the diversity of people and skills needed to support Rubin Observatory and encourages them to imagine themselves in a STEAM career. You will also have an opportunity to discuss ideas with colleagues on how to successfully integrate these activities into your classroom. Certificates of participation for professional development hours will be awarded to those who participate in the entire workshop. Teachers will receive educational materials from Rubin Observatory. *Please bring a laptop if possible.*

Agenda

- Coloring the Universe classroom investigation
- Lunch provided courtesy of LIGO
- Rubin Voices Trading Cards activity
- LIGO facility tour

Questions? Contact education@lsst.org [Register here](#)

LOUISIANA WILDLIFE FEDERATION ACCEPTING APPLICATIONS FOR 6th CONSERVATION LEADERSHIP CORPS

The Louisiana Wildlife Federation (LWF) is accepting applications for the Edgar Veillon Conservation Leadership Corps (CLC), a leadership development program that provides training for future conservation leaders in Louisiana.

Undergraduate students 18 or older that will be enrolled at a Louisiana college or university during the Spring 2024 semester are eligible to apply (must reside in Louisiana during Spring 2024). Those selected will receive training to develop and practice leadership skills and techniques to analyze conservation policies and advocate for solutions.

Training will be provided by leaders in natural resources conservation in the public, non-profit and private sectors. Students will be presented with real-world issues and experience. Through the integration of presentations, case

Louisiana Science Teachers Association Newsletter (www.lsta.info)

studies, and collaborative activities, students will learn about conservation policy while building skills in leadership and advocacy.

The 2024 class of Louisiana Wildlife Federation's Conservation Leadership Corps will focus on four major topics affecting Louisiana's wildlife, habitats, and natural resources; these include forest uses, coastal restoration, wind energy, and carbon sequestration. Along with in-depth exploration of these topics, participants will also receive professional media training, debate skills, and communication experience.

This year's program features a hybrid format with both in-person and online meetings. Sessions will be held one weekend each month from January-April on the following dates:

Session I January 26-27, 2024 (In-person at Chicot State Park in Ville Platte, LA)

Session II February 23-24, 2024 (online)

Session III March 22-23, 2024 (online)

Session IV April 19-20, 2024 (In-person in Baton Rouge)

There is no fee to apply. Upon successful completion of the program, each participant will receive a Certificate of Accomplishment, a letter of commendation, and a \$200 scholarship. Students will also receive a complementary one-year membership to the Louisiana Wildlife Federation where they can continue active involvement in conservation advocacy.

Visit LaWildlifeFed.org to learn more and apply. Deadline to apply: Monday, November 20, 2023.

Contact:

Jimmy Frederick

lwf@lawildlifefed.org

225-344-6707



Louisiana Wildlife Federation



LOUISIANA WILDLIFE FEDERATION
Conservation Leadership Corps

**APPLY ONLINE BY
NOVEMBER 20, 2023**



Advocacy & Leadership

Learn about conservation policy and build skills in leadership and advocacy in:

- forestry uses
- coastal restoration
- wind energy
- carbon sequestration.



Eligibility

Open to undergraduates of any Louisiana college or university (18+)



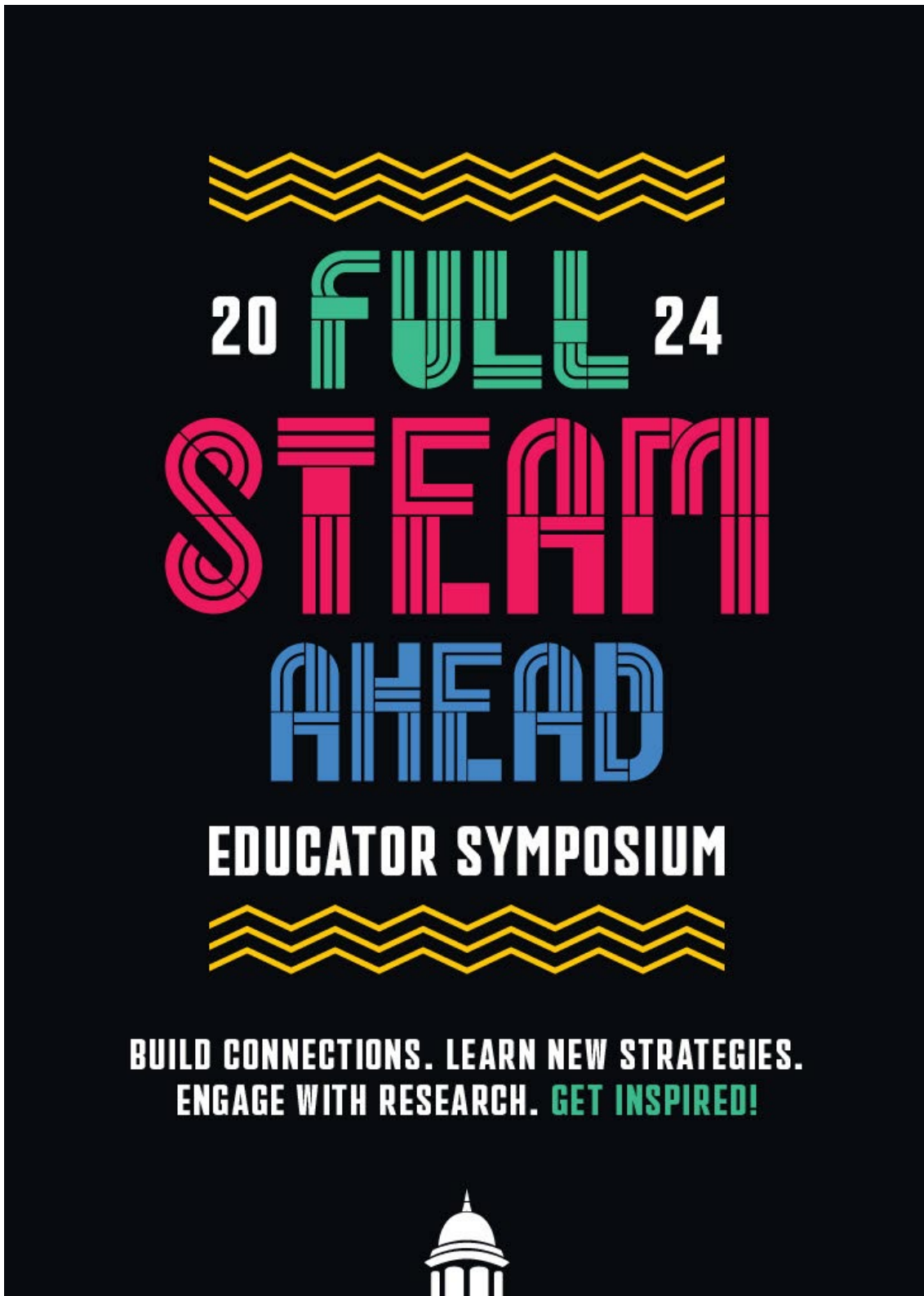
Session Dates

- January 26-27, 2024 (at Chicot State Park)
- February 23-24, 2024 (Virtual)
- March 22-23, 2024 (Virtual)
- April 19-20, 2024 (In-person in Baton Rouge)



www.LaWildlifeFed.org

Full STEAM Ahead Educator Symposium



2024 THEME

KINETIC CONNECTIONS

SAVE THE DATE! 

February 8-9, 2024

at Centenary College of Louisiana

When two objects collide, they briefly “connect,” resulting in the transfer of kinetic energy from one to the other. This exchange reveals a fundamental truth: **connections are catalysts for change.** At this year’s inaugural symposium, we’ll celebrate the power of connection in shaping progress and understanding. Collaborations among scientists yield groundbreaking discoveries, educational networks empower the next generation, and social bonds enrich our lives with shared knowledge, ideas, and inspiration.



Scan the QR code
for registration
and further info!



Ochsner Teacher Professional Development

Ochsner
Education Outreach

Teacher Professional Development

Who: This opportunity is open to all teachers who teach any course within the scope of Science, Makerspace, Computer Science, STEM

What: Professional Development around hands-on learning that aligns to state standards and connects the classroom to careers in STEM.

Where: Ochsner Medical Center
1514 Jefferson Hwy, Jefferson, LA 70121

When:

- **K-5 Teachers:** Saturday, October 21st, 8:30 AM to Noon
- **6-12 Teachers:** Saturday, November 11th 8:30 AM to Noon



Your Time is VALUABLE

- All teachers will receive \$100 stipend for attending
- Teachers who live more than 20 miles away will receive a Gas Stipend to attend

Spaces are limited! Sign Up Now!

Use the QR code to complete the registration form



Alliance

What is the Alliance?

The Alliance will provide K-12 science and math teachers in the state with professional development events, direct access to high quality STEM equipment and tools to utilize in their classrooms, networking opportunities to collaborate with other teachers, and resources that will help them build lesson plans and incorporate hands-on activities into their curriculum. The Alliance will unify the STEM education ecosystem in the region with the primary goal of supporting classroom teachers and educators and connect them with STEM-focused nonprofits in the region.

Visit the EdOpportunities Database!

Search from 100's of local organizations for field trips, professional development, camps, experiential learning, internship, classroom funding, scholarships, contests and more. Select your path below, and find what's happening in your community.



For more information visit:

- **Louisiana Alliance for STEM Teaching**
- **STEM Library Lab**
 - STEM Library Lab fosters high-quality active learning by providing teachers with access to equipment, programs, experiences and STEM instructional support to drive student success.
- **Tulane Center for K-12 STEM Education**
 - The Tulane Center for K-12 STEM Education has three goals: connecting Tulane and the New Orleans community, engaging local students through hands-on experiences in STEM, and inspiring confidence in the next generation of leaders and learners. The Center serves 4000 students and teachers annually, focusing on underserved and minority populations.



Louisiana STEM Library Lab: <https://laastemt.wp.tulane.edu/>
 Tulane Center for K-12 STEM Education: <https://sse.tulane.edu/k12-stem>
 EdOpportunities database: <https://opportunities.stemlibrarylab.org/>

Junior Science and Humanities Symposium

Junior Science and Humanities Symposium



WHAT IS JSHS?

Junior Science and Humanities Symposium (JSHS) is a Department of Defense sponsored STEM program (U.S. Office of the Secretary of Defense and the U.S. Departments of the Army, Navy, and Air Force). Promotes original research and experimentation in the sciences, technology, engineering, and mathematics (STEM) at the high school level through competition at regional and national levels in eight core STEM areas.

Biomedical Sciences	Mathematics & Computer Sciences
Chemistry	Medicine & Health
Engineering & Technology	Physical Sciences
Environmental Sciences	

Life & Behavioral Sciences

Connects talented students, their teachers, and research professionals aiming to develop trained individuals for STEM-based careers and research.

WHO IS ELIGIBLE?

- U.S. Citizens and Lawful Permanent Residents
- Students in 9th-12th grade



"JSHS has been one of my most enjoyable experiences in my high school STEM career. It has taught me the value of scientific research and the value of diversity in STEM and the importance of scientific research for shaping the future."

—JSHS Student 2020

WHY SHOULD I PARTICIPATE?

- Develop and conduct original STEM research.
- Meet like-minded peers from other schools/regions.
- Receive free mentorship from professionals and experts in your chosen STEM field.
- Participate in a regional symposium and present to your peers and STEM personnel from the Department of Defense, federal research laboratories, and academia.
- Regional top five winners are sponsored to attend and compete at the National JSHS competition.
- Win scholarships for college and get publicly recognized for your work!
- Connections for future research opportunities
 - other Army, Navy, and Air Force STEM programs,
 - universities, and
 - other STEM professionals.
- Access to Department of Defense, university, and STEM industry laboratory tours, speakers, and other activities to provide insight into STEM careers and professional development.

I AM INTERESTED! NOW WHAT?

- Find your region at <http://www.jshs.org/regional-competitions/find-your-region/>
- Go to www.jshs.org to learn more
- For additional inquiries contact admin@jshs.org



IN COLLABORATION WITH OUR ESTEEMED ACADEMIC PARTNERS.

@GO_JSJS | JUNIOR SCIENCE AND HUMANITIES SYMPOSIUM - JSJS
JSHS.ORG | 1-703-312-9206 | ADMIN@JSHS.ORG

Learning Blade®

Learning Blade®, a STEM, Computer Science, and CTE resource is available **FREE** statewide in Louisiana through a joint venture of the Louisiana Board of Regents, LaSTEM, the Boeing Company, the Louisiana Dept. of Education and the Foundation for East Baton Rouge School System.

Learning Blade's over 400 online interactive lessons include **over 100 science-related** lessons that are aligned to state science academic standards for grades 5-9. Students are exposed to hundreds of unique STEM/CS/CTE-related careers and technologies while reviewing academics. [See Mission Outlines.](#)

Learning Blade also recently added the **New Introduction to Coding** course which includes over 20 hours of coursework aimed at 7th-8th graders but can also be used for other grade levels.

Sign up for your free Louisiana Learning Blade account today by filling out the form at www.LearningBlade.com/LA.*

Email us at info@learningblade.com to set up training or to learn more.

*Note: Learning Blade is free to all Parishes/Districts upon the signing at the Parish/District level of the [Student Data Sharing Agreement](#).

Audubon Zoo

This school year is rapidly approaching and Audubon Nature Institute's School Programs team would love to give your students a **wild** start to the year with our 45-minute programs featuring live animals from the Zoo. [Click here](#) to request your virtual school program, FREE for Title One Schools, today!

Audubon's virtual programs are highly interactive and connect your students to nature and science over Zoom. Our lessons are aligned with Louisiana state science standards for grades K through 12th and are offered Monday through Friday from 9:00am – 3:00pm. We have availability starting August 29th. Reservations will be made on a first-come and first-served basis, so don't delay in securing this fun and unique opportunity to enrich your curriculum!

Audubon's virtual school programs are free for all Louisiana Title 1 schools*, while Title 1 Targeted Assistance Programs receive a 10% discount from the \$100 per program rate. (*Limit one free program per classroom per school year.)

Audubon's Virtual School Program themes include:

- **K-2nd Creature Coverings:** Explore the world of animal coverings, coats, skins, and more!
- **3rd-5th Oh, the Things They Eat:** Learn about the different roles animals play in a food chain!
- **6th-8th Bayou Diversity:** Discover the rich ecosystem of Louisiana and learn about the interdependence of native plants, animals, and humans!
- **9th-12th Mississippi River Story:** Learn how the Mississippi River shapes the land and the impacts it has on our ecosystem and daily lives.
- **9th- 12th impacting Wetlands:** Learn how wetland ecosystems impact coastal communities and discover local conservation groups and their efforts.

You can find more information at <https://audubonnatureinstitute.org/virtual-education> or feel free to reach out directly to this email (schoolprograms@auduboninstitute.org).

Arctic Ocean Curriculum Unit

The Arctic Research Consortium of the U.S. (ARCUS) announces a new resource, a curriculum unit focused on the Arctic Ocean.

The Arctic Ocean Curriculum Unit was created by ARCUS with funding from the North Pacific Research Board. The unit updates lessons originally created by PolarTREC alumni teachers to create a unit that uses recent data, aligns with Next Generation Science Standards (NGSS), polar, and ocean literacy principles, and encourages cultural relevancy. The format used lends itself to the changes in education - providing student-facing slide decks that allow them to move through the lessons with more independence.

The unit traces the movement of energy throughout the Arctic Ocean environment. There is a total of 18 lessons broken into two main components. The entire unit can be downloaded through the resources section of the PolarTREC website (<https://www.polartrec.com/resources>).


For more information and to download the unit, go to: Arctic Ocean Curriculum Unit webpage: <https://www.polartrec.com/resources/lesson/the-arctic-ocean-curriculum-unit?amp%3Bqid=6854120>

For questions, contact: Janet Warburton, warburton@arcus.org

Unique Learning Opportunities Await You at Cane River Creole NHP

Cane River Creole National Historical Park is proud to partner with teachers and educators to provide curriculum-based, hands-on Science, Arts, Environmental Science, and History education experiences in the park, virtually, and in your classrooms. We are excited to connect both educators and learners with the unique resources of the Cane River area. Bring your class to visit Cane River Creole National Historical Park to explore a range of subjects including science, history, and the arts on one of our curriculum-based field trips. For schools nearby, Rangers will bring the park to your classroom through our In-Classroom Visit Programs. These programs include a wide range of topics such as Environmental Science and Reading, all building on curriculum standards. For schools further away, educators can schedule a program from anywhere in the world via a Distance Learning Program. Enhance your student's in the classroom learning with our lesson plans and other learning materials available to you online at www.nps.gov/cari/learn/education.



The park is pleased to offer a range of professional development. Join us for one of our single day Education workshops and return to your classroom with new tools and materials. For a more in-depth experience – become a Teacher-Ranger-Teacher (TRT). TRT is a program that offer teachers a unique opportunity to enhance their teaching resources with National Park Service-based Science, Technology, Engineering and Mathematics (STEM) education, use primary sources, and experience place-based learning. All while earning graduate credit through partnership with the University of Colorado  Denver



National Park Service staff are available to help educators infuse their learning with National Park Service and STEM resources. To reach the park's education team visit us at www.nps.gov/cari/learn/education, email cari_interp@nps.gov, or call 318-352-0383 x316 and leave a voicemail. The Park Rangers at Cane River Creole NHP cannot wait to connect you with these tools and resources!

LASM Announces Return of Free First Sundays



FIRST SUNDAYS ARE BACK!

Every First Sunday of the Month
1 PM - 5 PM

Free museum
and Irene W.
Pennington
Planetarium
admission!

Sponsored by

**Madison
Lamar**

Youth Wetlands Program Online Learning Platform

Youth Wetlands Program online learning platform was now available. Teachers can sign up for free to gain access to lesson, activities, and other distance-learning resources. I'm including a link to the press release that went out from LSU AgCenter about the site. (<https://www.lsuagcenter.com/profiles/jmorgan/articles/page1611327199513>)

NEEF Watershed Sleuth Challenge

[The Watershed Sleuth Challenge](#)

With NEEF's Watershed Sleuth Challenge, students will learn more about their local watershed—what it is, why it's important, and what they can do to help protect it—as they earn badges at each level of this three-part course

New and Updated Resources for OpenSciEd Middle School Pilot

To assist teachers, schools, and systems with piloting OpenSciEd for middle school, the Department has updated existing resources and released new pacing documents.

These resources include

- [Grade 6](#) and [Grade 7](#) pilot guides updated with pacing guidance for the first three units in each grade;
- [Grade 7](#) and [Grade 8](#) pilot guides updated with links to newly released public units;
- [OpenSciEd Distance Learning](#) guidance updated to include Grade 8 Natural Selection; and
- [OpenSciEd Purchasing and Professional Development](#) updated kit purchasing information for revised units.

Additionally, ten units are now available in the [National Instructional Materials Access Center \(NiMAC\) Inventory](#) with more coming soon.

Please contact STEM@la.gov with questions.

STEM Resources from the US Department of Education

The US Department of Education has recently shared two resources that may be useful supporting STEM learning.

- [Data.gov](https://data.gov) is a database with over 335,221 real-world datasets from a variety of sources updated weekly and connected to free resources to help show how data shapes our lives.
- [STEM Rising](https://stemrising.org) from the US Department of Energy features a monthly newsletter, social media connections, virtual learning resources, college workshops, and online career resources.

Please contact STEM@la.gov with questions.

New Self-Paced Science Professional Learning Modules Available Now

To assist teachers, schools, and systems with implementation of [high-quality science curricula](#), the Department has released three [self-paced learning modules](#). These resources are designed to fit flexibly in a variety of professional learning formats. Modules may be accessed individually for an “at your own pace” style of PD or delivered by Content Leaders or other science leaders to drive professional learning and facilitate collaborative conversations. Learning modules are focused on the topics below and are available now.

- Science Instructional Model and Planning Guide
- Productive Science Talk and Planning for Discussion
- Leveraging Student Resources in Science

Each module includes a brief description, video, slide deck, and associated handouts.

Please contact STEM@la.gov with questions.

Interact with PC's New Education Videos!

Join Pontchartrain Conservancy's [Education Department](#) in a series of videos that encourage participants to learn more about their local environment. These videos are interactive, with places for viewers to pause and answer questions, make predictions, or design and test their own experiments. Students and anyone interested are invited to participate in fun interactive ways, from writing down answers to building models!



There are currently four videos in the series that cover an array of environmental topics. The Coastal Land Loss Video Survey explains what the primary causes of land loss are and what can be done about it. The Ecosystems of the Pontchartrain Basin Survey covers what an ecosystem is and the animals and plants that live in ecosystems near the Pontchartrain Basin. The Hydrological Modifications Video Survey explains what hydrological modifications are and their main functions. The MLODS Video Survey teaches the Multiple Line of Defense strategy and its impacts on coastal communities. <https://scienceforourcoast.org/pc-programs/education/interactive-videos/>


NASA EXPRESS



NASA EXPRESS features updates from NASA and STEM associates about workshops, internships, and fellowships; applications for grants or collaborations; promotions for student and educator opportunities; online professional development; and other announcements.

Louisiana Department of Wildlife and Fisheries

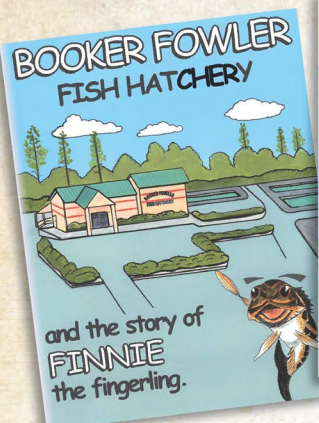





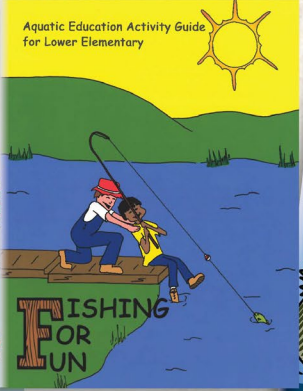
Aquatic

ACTIVITY BOOKS

Available for educators. All activity books are correlated to the Louisiana Student Science Standards.

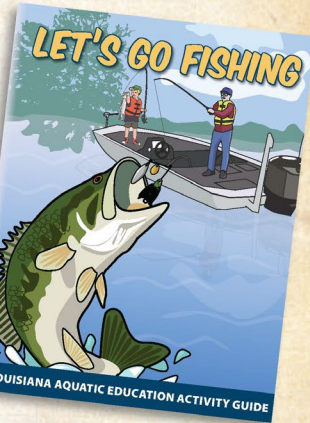


BOOKER FOWLER FISH HATCHERY
and the story of **FINNIE** the fingerling.



Aquatic Education Activity Guide for Lower Elementary

FISHING FOR FUN



LET'S GO FISHING

LOUISIANA AQUATIC EDUCATION ACTIVITY GUIDE

BOOKER FOWLER FISH HATCHERY and the Story of Finnie the Fingerling
(K-6th grade)

Reading comprehension and coloring. Follow Finnie through the hatchery and learn about fish life cycles.

Included Topics:

- Fish identification
- Fish Production
- Adaptations and more

FISHING FOR FUN!
(K-3rd grade)

Engaging activities and coloring workbook.

Included Topics:

- Fish identification
- Fish Production
- Anatomy
- Adaptations
- Food chains
- Habitat

LET'S GO FISHING!
(4th-6th grade)

Interactive activities and student guided research.

Included Topics:

- Fish adaptations
- Fish anatomy
- Food webs
- Invasive species
- Habitat
- Fish identification
- Reproduction and more

Online educator resources: videos, lesson plans and background information

Order books and make an account at
www.bit.ly/ldwfactivitybooks

IMPORTANT: All educators who use these aquatic activity books are required to submit their teaching hours. Time spent teaching and preparing aquatic lesson plans is used to help LDWF acquire federal funding for aquatic education programs and allows us to offer these FREE activity books for Louisiana students.

FREE graphic by macrovector

Chemistry Shorts™ Releases New Video and Lesson Plan on Directed Evolution Technology

The materials are available free of charge via chemistryshorts.org

Like demolition derby cars continually upgrading to face greater and greater challenges, enzymes can undergo modifications in the test tube that make them better and better at solving problems in our everyday lives. But can we evolve them fast enough to clear some of our biggest obstacles?

Our world faces climate, economic, and sustainability challenges that we don't yet have the tools to fix. "[Driving Reactions](#)," a nine-minute short film from *Chemistry Shorts*, explores how directed evolution and the chemical sciences are creating some of these new tools.

"Driving Reactions" explores the power of harnessing nature's own innovations to solve problems. Featured scientists [Professor Hal Alper](#) of the University of Texas at Austin and Nobel Laureate [Professor Frances Arnold](#) of the California Institute of Technology use directed evolution to design enzymes that work as molecular machines, helping create a more sustainable world using the power of chemistry. These new enzymes open the door of scientific progress, creating solutions for recycling waste, creating sustainable fuels, and more efficiently producing materials we use in our everyday lives. "Driving Reactions" focuses on Dr. Alper's innovative work to design an enzyme that can efficiently degrade PET, or polyethylene terephthalate, one of the most common plastics found in water bottles and other everyday objects, into infinitely recyclable and reusable products.

"We have the ability to use the power of chemistry to find sustainable solutions for the future." - Hal Alper, "Driving Reactions"

"Driving Reactions" is aimed at high school and college students and can be used as a starting point for discussions around polymer chemistry, enzyme reactions, directed evolution, DNA, and plastic recycling.

The film is available for immediate viewing and use in teaching free of charge on the [Chemistry Shorts YouTube channel](#). A full lesson plan to accompany the film is available on the [Chemistry Shorts website](#).

BACK FOR THE FUTURE!

November 2-3, 2023
LATM/LSTA Conference
Raising Cane's River Center, Baton Rouge

LOUISIANA ASSOCIATION OF
TEACHERS OF MATHEMATICS

Science
Louisiana Science Teachers Association