

MCSD STEM NEWSLETTER

DECEMBER
2024



Sunshine State Scholar

Congratulations to Nathaniel Shugarman of CSHS!

Nathaniel has earned the distinction of being MCSD's representative in Orlando for the Sunshine State Scholar conference and awards. We are very proud of Nathaniel's achievements in math and physics, performance on PSATs and AP exams, and leadership in Mu Alpha Theta. Congratulations, Nathaniel!



OCEAN GUARDIAN SCHOOL DISTRICT

Year One: Three Pilot Schools
• KWHS (Shannon Duffy & Alyssa Cerkleski)
• POI (Melissa Byrne)
• SLS (Zach Pomrunk)

Year Two: 35% - 55% of the district

Year Three:
• One Ocean Literacy Learning Outcome and Action Theme

One District Initiative:

Rainwater Filtration Gardens

3 year initiative

Click [HERE](#) to see the flyer!



The Ocean Guardian School District Rainwater Filtration Gardens are in the finalization stages for gardens at KWHS, POI, and SLS!



Community Partners Up and Coming



Everglades Literacy

Virtual Classroom Presentations for January.

[Click for Flyer](#)

Reef Relief

Virtual Lesson Series and Annual Meeting

[Click for Flyer](#)

Eco-Discovery Center

Jan.11.2025: Plant a Million Corals guest speaker
Saturday, 1/11/25 at 10:30 am!

Art & Historical Society

[Click HERE](#) to see the four free workshops available in January 2025!

Sharks4Kids

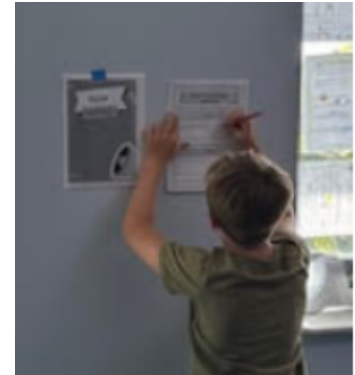
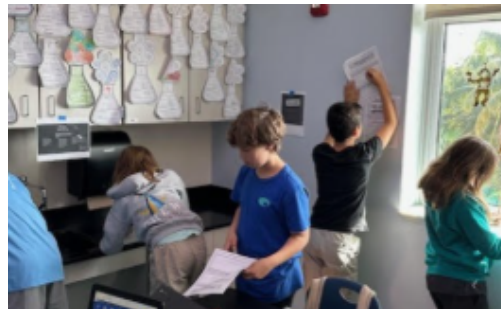
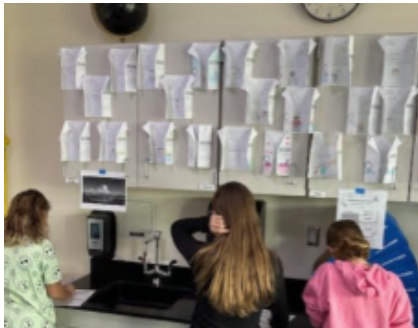
Webinar Series: Dive into the World of Sharks
Mystery of the Megamouth Shark, great for grades 1-5. Janu 29,2025. [Click HERE](#) to register!



WHAT'S GOING ON IN **STEM**?

Ho ho ho!

Jordan Ballester's class researched STEM careers and made "help wanted" posters for a gallery walk!



PKS 6th Grade Gallery Walk

SSE and vermiculture composting with wiggler worms

Mr. Sessler's K-5 STEM students learned about recycling and trash programs from the Monroe County Recycling and Outreach Coordinator.



Students built 3 vermiculture containers that students will be able to use with wiggler worms to divert food items from our landfills



KWHS Aerospace Engineering

The AE class used Aery-32 design software to design and build their own gliders, using balsa and basswood. . The gliders were launched by rubber bands to test their designs.



KWHS – Biology

Ms. Wood's Biology Class made "ugly sweaters" to review concepts learned in Semester I!



KWHS Anatomy and Physiology

Ms. Fink's A&P class molded model hearts from clay, foam, and tubing to simulate blood flow!



KWHS Chemistry

Ms. Nelson's Chemistry class studied precipitate reactions and made ornaments using Borax and pipe cleaners



Contact Information:

Donna Tedesco

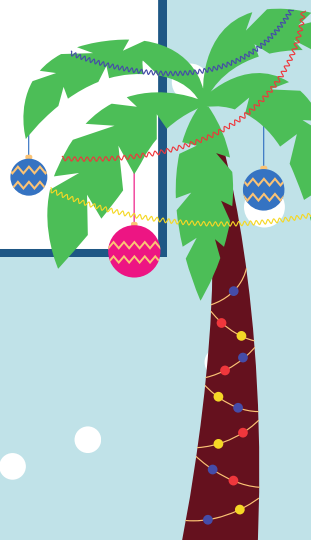
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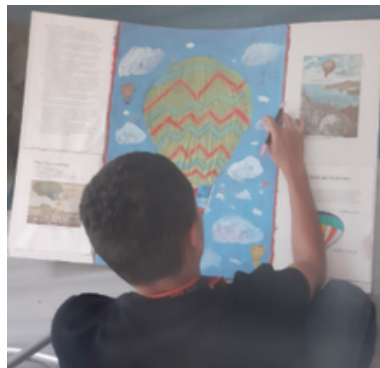
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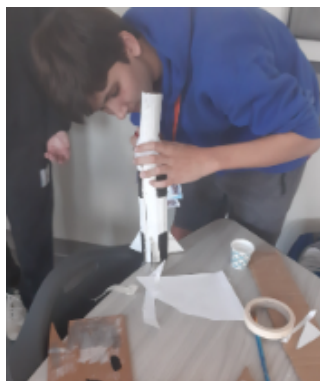




College of the Florida Academy



Mr Hughes and his Aerospace Engineering class are creating an aerospace museum, in which each exhibit showcases an innovation in aviation.



PKS Chemical Reactions

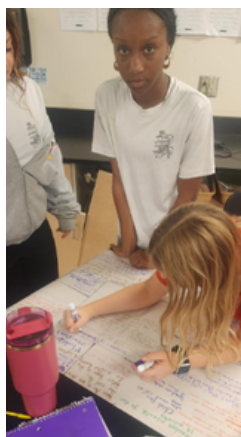
Ms. Curl's 8th grade science classes at PKS experimented with chemical reactions and to describe the Law of Conservation of Mass through investigative conversations.



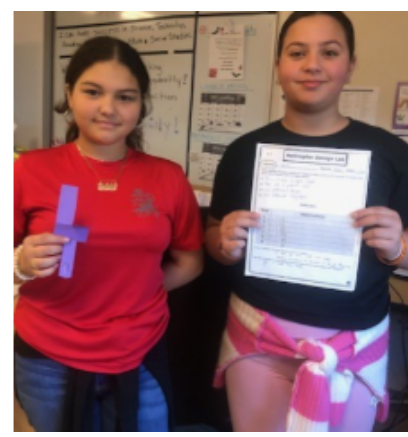
HOB – Pedro Lara's Class and STREAMS Class



Mr. Lara's 6th grade class worked in collaborative groups to build knowledge projects about extreme weather at unique stations around the room. The stations included reading, pictures, vocabulary, and a video.



Ms. Jarrot's STREAMS class practiced the scientific method with a "Helicopter Model Activity Lab."



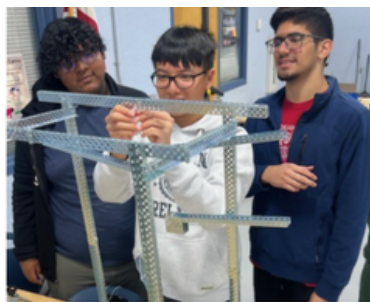
TVM

Bobbie Burson's students at Treasure Village learned how to drive US Coast Guard boats and applied their First Aid and CPR skills after completing a mock "man overboard" drill.



MMHS Rob Driscoll

Mr. Driscoll's STEM classes built Rube Goldberg machines using VEX parts, transferred basil into pots from the hydroponic gardens, and enjoyed a snorkeling trip with MarineLab in Key Largo.



AVID AND STEM - KWHS

Mrs. Rech's AVID classes visited the STEM renewable energy, marine technology, and aquaculture labs, and the nursing program at the College of the Florida Keys

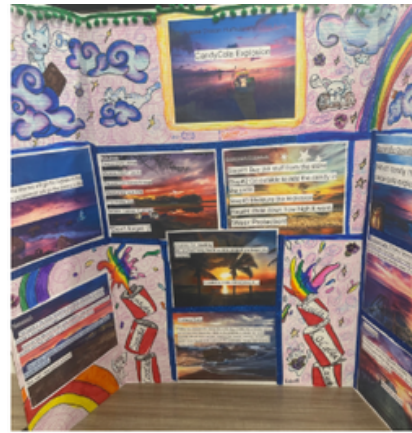
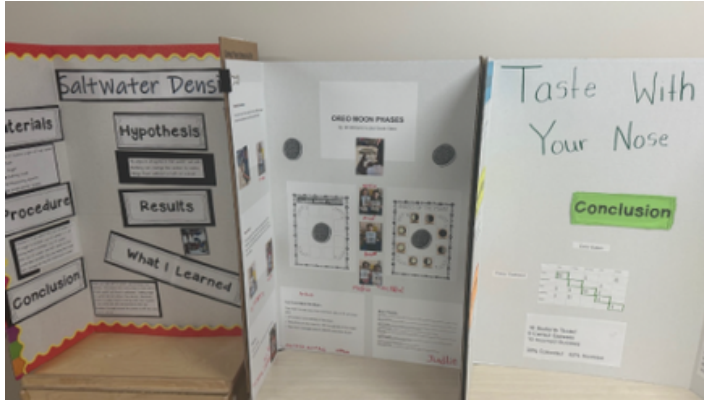




STEM FAIR



GAE – Scott Gruenauer STEM fair



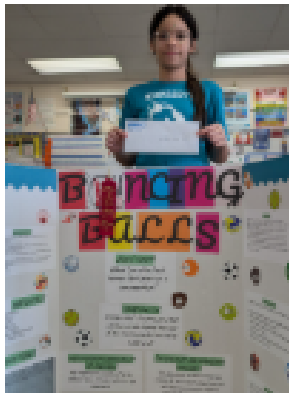
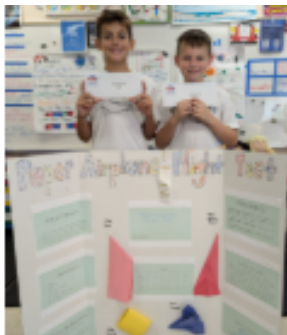
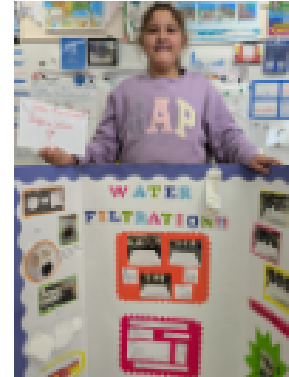
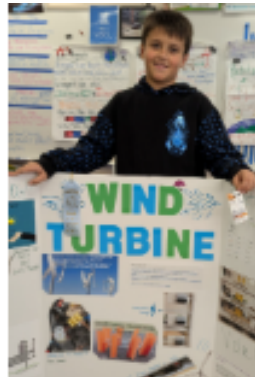
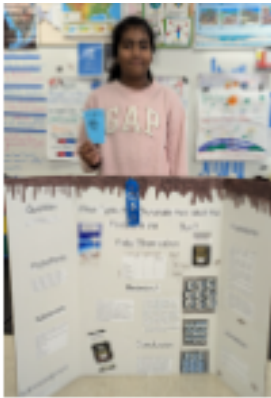
MMHS STEM fair



HOB STEAM Night



POI STEM FAIR WINNERS!



CFK Students Pilot for a Day!

Catheryn Miller and Jonathan Oggeri spent the day with NAS KW experiencing a day in the life of a Navy pilot as part of NAS KW's Pilot-for-a-Day Program!



**Reef Relief, FKAA, Key West Botanical Gardens, and Key West Aquarium
Community Partners participating with exhibits at POI STEM fair!**



**CONGRATULATIONS! SUGARLOAF SCHOOL
FOR COMPLETING THEIR 5-YEAR OCEAN
GUARDIAN SCHOOL PROJECT!**

Students in Marine Science participated in the 6Rs recycling pathway. During their 5 years, students spent over 3,000 hours removing marine debris, installing 60+ recycling bins, and distributed over 1,350 reusable bags!

Ho ho ho!

UP AND COMING

REEF RELIEF

2024-2025 Virtual Lesson Series Schedule

All lesson times are in EST

Introduction to Coral Reef

9/18/24 2:30pm and 9/30/24 10:30am

Mysteries of the Deep Sea

10/7/24 10:30am and 10/16/24 2:30pm

Water Quality

11/7/24 2:30pm and 11/19/24 10:30am

Biology and Conservation of Seabirds

12/10/24 10:30am and 12/19/24 2:30pm

Shark Biology and Conservation

1/8/25 2:30pm and 1/21/25 10:30am

Fish Anatomy and Identification

2/3/25 10:30am and 2/11/25 2:30pm

Marine Megafauna

2/19/25 2:30pm and 2/25/25 10:30am

Marine Invertebrates

3/3/25 10:30am and 3/11/25 2:30pm

Biology and Conservation of Sea Turtles

3/26/25 2:30pm and 3/31/25 10:30am

Introduction to Oceanography

4/8/25 10:30am and 4/17/25 2:30pm

Marine Ecosystems of the Florida Keys

5/7/25 2:30pm and 5/15/25 10:30am

REGISTER HERE



2024-2025 School Year Everglades Literacy Virtual Classroom Presentations

Join us for FREE classroom presentations about various Everglades topics!
Choose your topic and click "Register Here" for the live webinars.

Kindergarten - 2nd Grade Presentations

Thursday, October 10, 2024 10:00 a.m. - 10:45 a.m.

- Exploring the Everglades Ecosystem - [Register Here](#)

Thursday, November 7, 2024 10:00 a.m. - 10:45 a.m.

- Everglades "Eye Spy" Adventure - [Register Here](#)

Thursday, January 9, 2025 10:00 a.m. - 10:45 a.m.

- Feathered Friends of the Everglades - [Register Here](#)

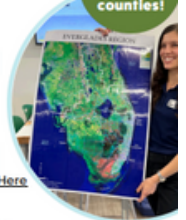
Thursday, February 20, 2025 10:00 a.m. - 10:45 a.m.

- Amazing Animal Adaptations in the Everglades - [Register Here](#)

Thursday, April 3, 2025 10:00 a.m. - 10:45 a.m.

- Everglades Evidence: Animal Tracking and Scat - [Register Here](#)

Open to
all teachers
and
counties!



3rd - 5th Grade Presentations

Thursday, October 17, 2024 10:00 a.m. - 10:45 a.m.

- Exploring the Everglades Ecosystem - [Register Here](#)

Thursday, November 21, 2024 10:00 a.m. - 10:45 a.m.

- Courageous Careers in the Everglades - [Register Here](#)

Thursday, January 23, 2025 10:00 a.m. - 10:45 a.m.

- Amazing Animal Adaptations in the Everglades - [Register Here](#)

Thursday, February 27, 2025 10:00 a.m. - 10:45 a.m.

- Trailblazing Women of the Everglades - [Register Here](#)

Thursday, April 17, 2025 10:00 a.m. - 10:45 a.m.

- Hidden Heroes of the Everglades - [Register Here](#)

For more information contact: Education@EvergladesFoundation.org

www.EvergladesLiteracy.org

REEF RELIEF

★ SAVE THE DATE ★

REEF RELIEF ANNUAL MEETING

WEDNESDAY, DECEMBER 4, 2024

5:00-9:00 PM

MARGARITAVILLE BEACH HOUSE RESORT

2001 SOUTH ROOSEVELT, KEY WEST



DR. BRIAN LAPOINTE
Researcher & Professor



IAN WILSON-NAVARRO
Visual story teller



KEY WEST

ART & HISTORICAL SOCIETY™

MONKEY IN PARADISE A NORBERT SZILAGYI RETROSPECTIVE

EXHIBIT ON DISPLAY
NOVEMBER 1 - JANUARY 26
BUMPUS GALLERY

