

15 September 2023

A PSCS NEWSLETTER

[pioneersprings.org](http://pioneersprings.org)

## Together we reach higher and go further!



Pioneer Springs has a unique vision—a belief in holistic education that connects students to the natural world and their community, while fostering joy, wonder, curiosity, and life-long learning in every student. We are a community school that depends on all of our stakeholders—including families—to make this vision a reality. As a tuition-free public charter school we receive 37% less funding than traditional public schools. That leaves a BIG gap between the funds that Pioneer Springs receives and what we need to educate your student(s). Our commitment to low student-teacher ratios in our elementary school, a campus with both historic and modern buildings, and extensive outdoor learning spaces is only possible through our community’s financial support. Together, we can reach higher and go further!

This year we are asking each family to raise \$250 per student to help us bridge that big gap and reach our goals. Here are some ways we can accomplish that:

- Make a one-time direct donation ([click here](#))
- Set up a monthly payment—just \$25/ month/ child over the school year would reach our goal ([click here](#))
- Reach out to friends and family to donate ([click here](#) and choose “become a fundraiser” to build your personal online campaign)
- Join our Development Team to seek sponsorships from local businesses and corporations (email [heidim@pioneersprings.org](mailto:heidim@pioneersprings.org))
- Employer matching grants ([click here](#))

In support of this ambitious goal, we are proud to present our Kindergarten–5th grade “Mudpuppy” and 6th–12th grade “Hellbender” challenges. Mudpuppies and Hellbenders are among the most remarkable of the 65 salamander species native to North Carolina. We’ll celebrate our successful Annual Campaign with Reach for the Trees on October 13, 2023. On this date, the Mudpuppies will have a fun run with the goal of collectively running the length of NC’s Mountain to Sea Trail, and the Hellbenders will compete in an obstacle course punctuated with an environmental literacy trivia challenge—think Tough Mudder meets Quiz Bowl. Families are invited to join us on campus to celebrate by cheering our students on, hopping in on dance parties, and socializing with other families! Students who reach their challenge goal of \$250 will receive a commemorative T-shirt on celebration day, and additional T-shirts will be available for purchase.

**Join Sandy Dixon, school naturalist, for a Holistic Tea at 9am as we discuss resources and activities that will help your family on their nature journey.**

### IMPORTANT DATES & ITEMS TO NOTE

- 15 Sept–13 Oct: Annual Campaign
- 18 Sept–22: School Spirit Week! [Click here](#) for themes!
- 21 Sept: 6th grade field trip to the Catawba Science Centre
- 26 Sept: 4th grade field trip to Reedy Creek Nature Centre
- 27 Sept: Holistic Tea with Sandy Dixon at 9am
- 29 Sept: Staff Development – NO SCHOOL for students
- 30 Sept: HS progress reports emailed
- Academic & Events Calendar [click here](#)

## Join the Pioneer Springs 20,000 hours outside challenge



“Children deserve to grow and learn in a place and alongside a force that is as wild and alive as they are.”  
-Nicolette Sowder

The benefits of time spent outdoors—particularly during childhood—are innumerable. Nature provides health benefits, from Vitamin D, to fresh air, and opportunities for movement, as well as chances for risk taking. When young people are outdoors, they engage in imaginative play and become emotionally grounded. Children even make important academic gains when they spend plenty of time in nature! Guided by our nature integration mission and inspired by the 1,000 Hours Outside movement, Pioneer Springs is embarking on a 20,000 hours outside challenge during our Annual Campaign. We’ll track hours spent outdoors on our campus, and are asking families to track their time outdoors beyond our campus with the goal of reaching a total of 20,000 hours outside from September 18–October 13. Be on the lookout for an outdoor time tracker for your family, and for information about class and school-wide outings. In the meantime, get inspiring ideas for spending more time outdoors here.

## Why you won’t be seeing this photo anymore

If you’ve been in the Pioneer Springs community for any length of time, then you are familiar with this photo of a Pioneer holding a marbled salamander. While this sweet photo has always been one of our favorite pictures from campus, we will not be using it anymore. Holding salamanders harms them. Salamanders are amphibians, so they absorb oxygen—as well as any chemicals and salts found on hands—through their skin. Salamanders are extremely sensitive to everything that they absorb. Many are endangered or at risk of becoming endangered, so we need to be particularly mindful about protecting them.



When you encounter a salamander, the best practice is to admire and study it from a distance, while leaving it in place in its habitat. As a school focused on environmental literacy, we want to promote best-practices for nature encounters, so will no longer depict humans holding salamanders. We encourage you to learn more about these remarkable creatures, and about how to protect them.

**Carpool Pro-Tip:** The least amount of traffic for the Hive Pickup is 3:35–3:45. Arrive during that window to avoid the line!

**Reminder: The train tracks are LIVE.** Please do not stop on the tracks as we often have trains passing through during carpool hours.

**Safety Advisory—The weather remains unseasonably hot.** Please remind your students to wear layers so that they are able to wear weather appropriate clothing, particularly t-shirts, when they are outdoors. Please make sure students have water bottles every day.

# Introducing the Hellbender

by Ia Lewis, sophomore Green Humanities student

Some people might look upon the eastern Hellbender as gross, ugly, or even as a danger, and while I agree they aren't the prettiest creatures, there's more to the "snot otter" than you might think. The first notable feature of this salamander is their incredible size with some adults being able to reach lengths of more than two feet and the average adult weighing around three pounds. This size is impressive, so impressive that it lands them in the spot of North America's largest salamander and only behind two others worldwide.



Despite being such a big animal, the Hellbender is a fairly elusive species, partly due to their excellent camouflage and cryptic coloration, which allows them to perfectly blend in with the brownish, rock covered riverbeds they call home, but also in part due to their shrinking population. Hellbenders are now classified as a protected species. The main factor at fault for the decline of their population is worsened water quality.

The eastern Hellbender is what's known as a "biological indicator". This term describes animals that are so sensitive to their surroundings, their presence signifies the health of an ecosystem. Being so sensitive, the Hellbender is especially susceptible to the effects of development and pollution, which have made so many potential Hellbender habitats uninhabitable for the salamander. For those who consider the Hellbender a danger to fish populations or even hold the belief that the Hellbender itself is poisonous, this might sound like good news; however, both of those assumptions are simply untrue. On the contrary, fish have been known to sometimes eat young or unborn Hellbenders, while the salamanders much more enjoy their primary food source of crayfish. Eastern Hellbender habitat stretches across 15 states, from New York down to Mississippi and with a significant population in the North Carolina mountains, it's important to keep them in mind and treat our lakes, rivers, and streams with respect. This will hopefully help this unique creature to stick around in North Carolina for a long time to come.

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## Project-Based Learning in action: high school Math IV students explore functions by designing roller coasters



How can you use math to make roller coasters faster, steeper and more thrilling? Our high school Math IV recently completed a Roller Coaster project, designed by Patience Alley, that led students to think creatively about writing and analyzing piecewise functions. Students were asked to design a 2D roller coaster on a coordinate plane by writing a function that could model the height of the coaster throughout its duration. They were then asked to analyze their coaster to find its maximum/minimum height and the time intervals at which it would be traveling fast/slow and above/below ground. This project required lots of collaboration, complex reasoning, creativity and problem solving skills! Shaniyah Smith, a senior, explained that the problem helped her understand how "linear and exponential functions are used to describe change—including changes in speed and the height of a coaster over distance."

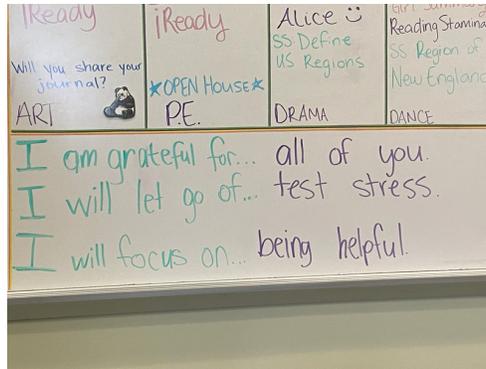
# Classroom Happenings



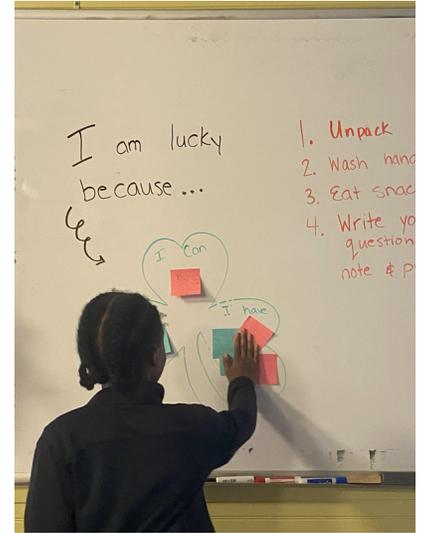
2nd grade learning about the Pollinator Garden, and learning about hummingbirds with Ms. Sandy.



Outdoor math at the Croft House.



5th grade morning mindfulness journal prompt



4th grade Morning Mindfulness reflection, "I am lucky because... I am..., I have..., I can...."



English IV student nature journaling at the pond.



4th grade building shelters in the woods. Shelter building is an important activity throughout childhood. From pillow forts to elaborate club houses, shelter building promotes cooperation and social skills. It also provides opportunities for imaginative play and storytelling, which is a foundation for literacy—and for joy and wonder!



Taco, the 2nd grade class pet, Taco, the lion mane rabbit.