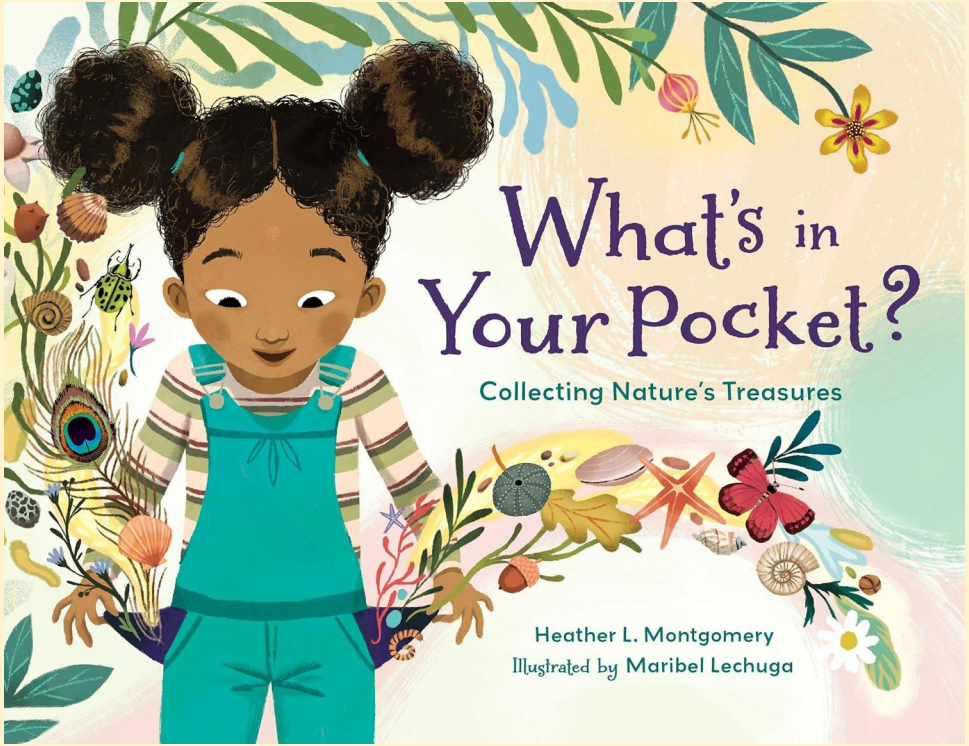


Resources & Activities For Using *What's In Your Pocket?* For Schoolwide Learning

How We Used *What's In Your Pocket?*

We are an elementary school serving around 900 students grades PreK-5. We are located in central Indiana.

We selected the book for our 2023-24 One School One Book program with the idea that we would do monthly activities featuring each of the scientists.

Every few weeks, our principals would read aloud one section of the book during a virtual Community Circle. Extension activities and lessons would take place in classrooms, in the library, and as a school.

Our One School One Book program is funded by our PTO.

In this slide show, you will find our timeline and resources.

If you have questions, please contact me at taryn_hassler@nobl.k12.in.us. You can also follow me on X @tarynhassler.

Community Circle 1: George Washington Carver

During this session, our principals introduced the book and read aloud the first few pages, the spread featuring George Washington Carver, and the end of the book. After pointing out how young Carver followed his interests, they read the biography in the back of the book to emphasize how young Carver's passions became his purpose.

Teachers were encouraged to do a follow up lesson using one or more of the resources provided.

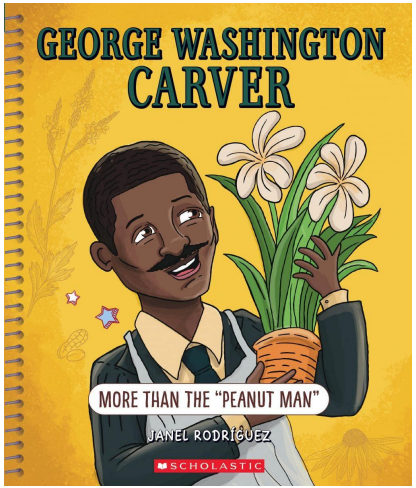
For a whole school activity, we held a milkweed release.

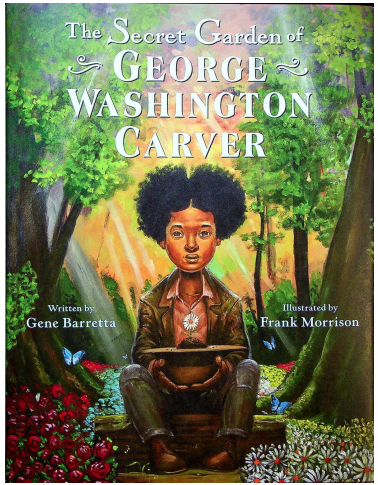
In the library, we focused on milkweed and seed dispersal.

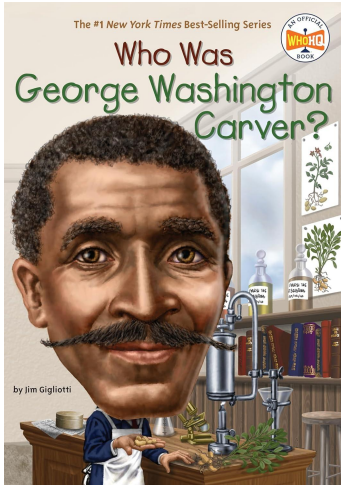
Notes:

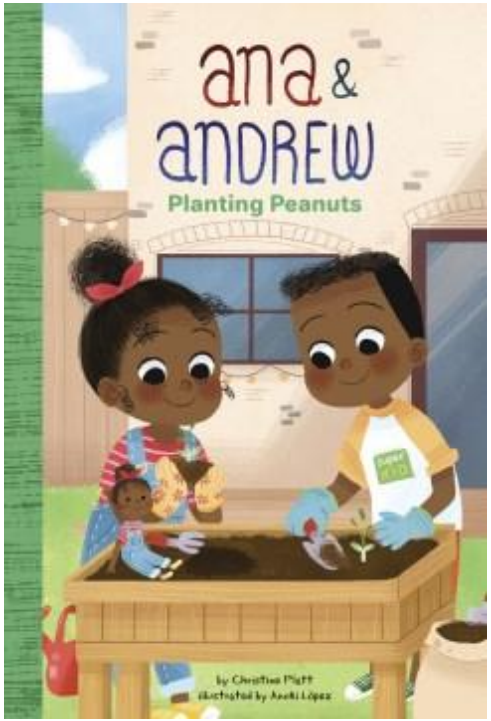
- As this was our kickoff and the start of the year, this session is a lot more involved.
- If I were redoing this project, I'd have gotten out our Nature Museum at the beginning as Fall is really the best collection time.
- You will notice that many of the library lessons focused on science. This is because we had new ELA and Math curriculum and our teachers needed more support with science and social studies.

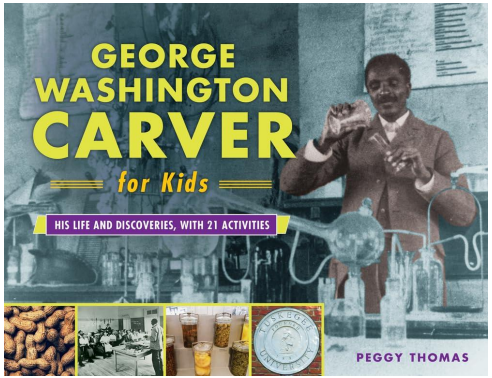
Suggested Books:



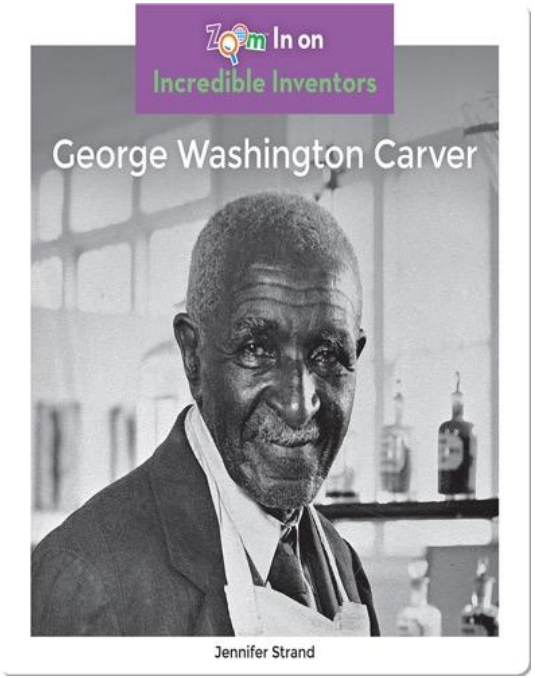


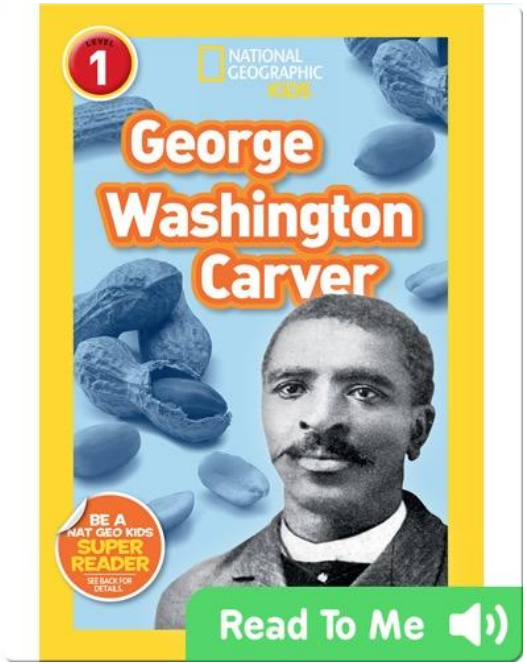


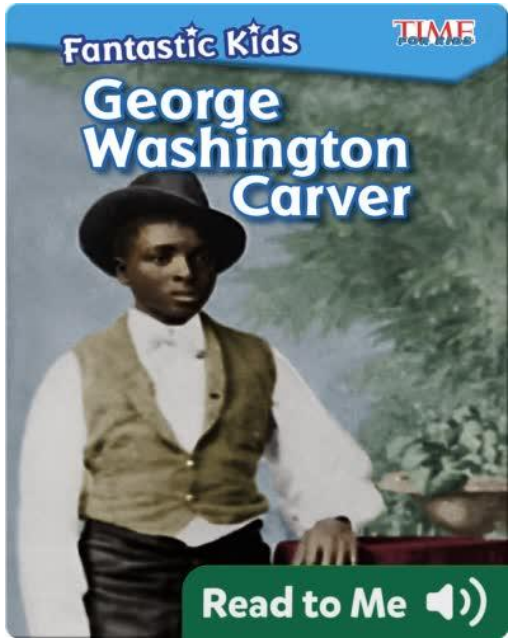




Books available on epic!:







Videos

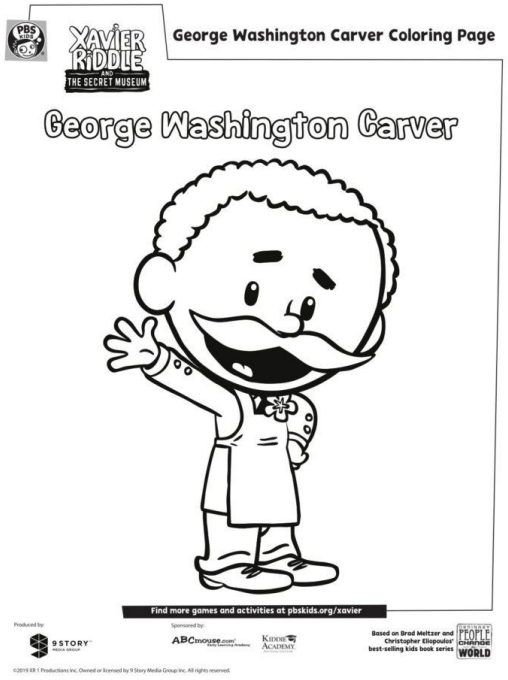
Story Bots: Great Innovators (best after biography)


WHO
WAS
GEORGE WASHINGTON
CARVER
???
twinkl

Henry Ford Museum (3:30)

Black America World Changers on epic!
(3:00)

Activities


George Washington Carver Coloring Page
XAVIER RIDDLE AND THE SECRET MUSEUM
George Washington Carver
Find more games and activities at pbskids.org/xavier
Produced by:
9 STORY MEDIA GROUP
Sponsored by:
ABCmouse.com
Kiddie Academy
Based on Brad Meltzer and Christopher Eliopoulos' best-selling kids book series
PEOPLE CHANGE THE WORLD
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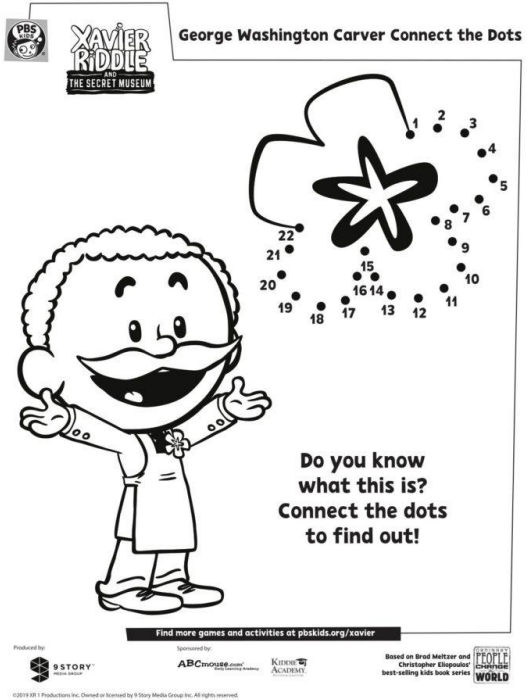
George Washington Carver Connect the Dots
XAVIER RIDDLE AND THE SECRET MUSEUM
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Do you know what this is? Connect the dots to find out!
Find more games and activities at pbskids.org/xavier
Produced by:
9 STORY MEDIA GROUP
Sponsored by:
ABCmouse.com
Kiddie Academy
Based on Brad Meltzer and Christopher Eliopoulos' best-selling kids book series
PEOPLE CHANGE THE WORLD
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Activities

George Washington Carver loved to draw and paint flowers. Some ideas:

- Directed Draw Flower
- How to Draw a Flower video
- Practice cut & paste by making flower collage.
- Read aloud from *The Secret Garden of George Washington Carver* while you create.

Free on TPT

Name:_____Date:_____

George Washington Carver

George Washington Carver was born in 1864 in Missouri. He was a scientist that invented, or made, many things. He invented mayonnaise, paint and shaving cream. He made many things from peanuts and sweet potatoes. George Washington Carver taught many things to farmers to help them grow better crops.

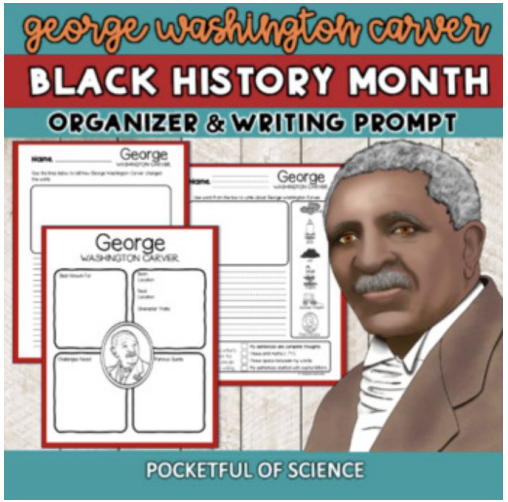
Picture of George Washington Carver taken by Frances Benjamin Johnston in 1906

Free on TPT


George Washington Carver
George Washington Carver was an African American man born in January 1864 in Diamond Grove, Missouri.
He was born a slave, but was a sick child and could not work very much. Instead of working, he would study and draw the plants he saw around him. He grew up loving plants and science, and many people called in "The Plant Doctor."
When slavery was abolished, or ended, his former masters raised him as their own son, and gave him an education. He loved learning and was a good student. He graduated from Minneapolis High School in Kansas.


george washington carver
needed
created
changed

Free Graphic Organizers










Whole School Activity: Milkweed Pod Exploration

To mimic the story, we gathered our students outdoors and gave them each a milkweed pod to open. It was a windy day so it really helped us show off wind dispersion. See it in action here.

Supplies:

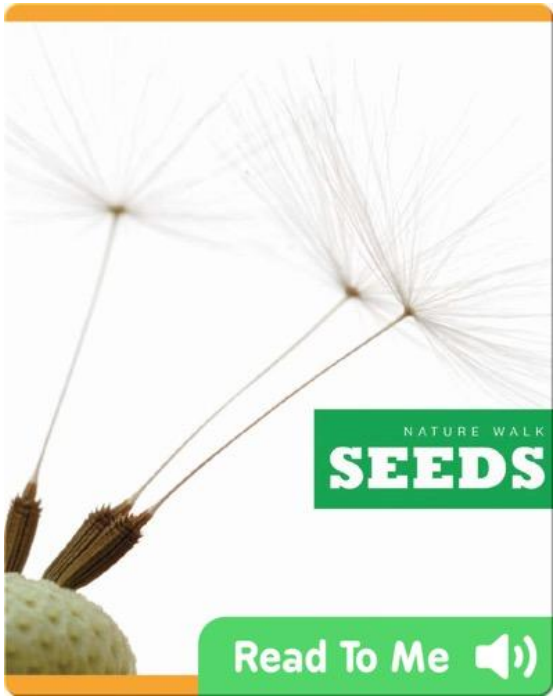
- Milkweed Pods (we sourced from ebay)
- Ziploc Bags (in case students wanted to take pods home)

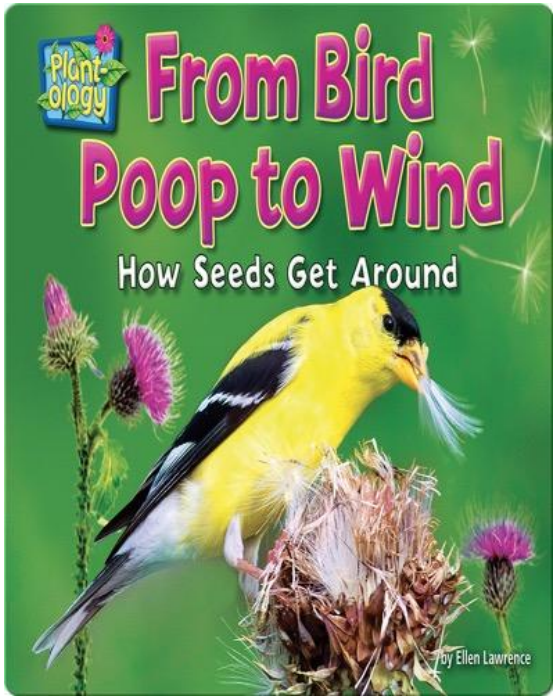
Notes:

- We had our students sit in a large circle in our recess area.
- Teachers handed out pods in baggies AFTER they got outside.
- This is MESSY, be sure to clear it with your custodial staff. Lots of fluff found its way back in the school.
- Alert for allergies. While dried pods are fine to touch, that much fluff in the air can be difficult for those with seasonal allergies.

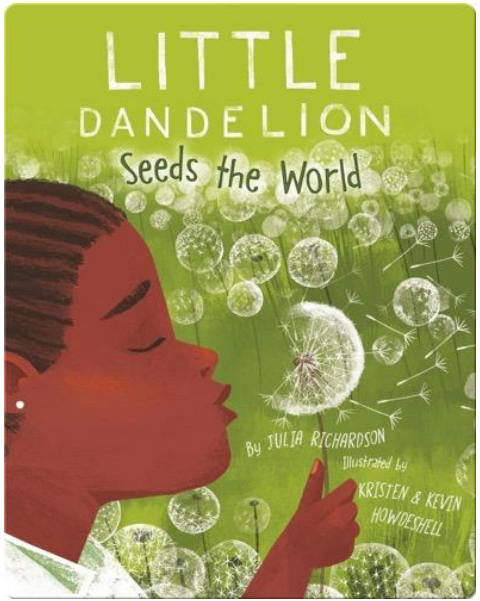
Milkweed/Seed Dispersal Resources

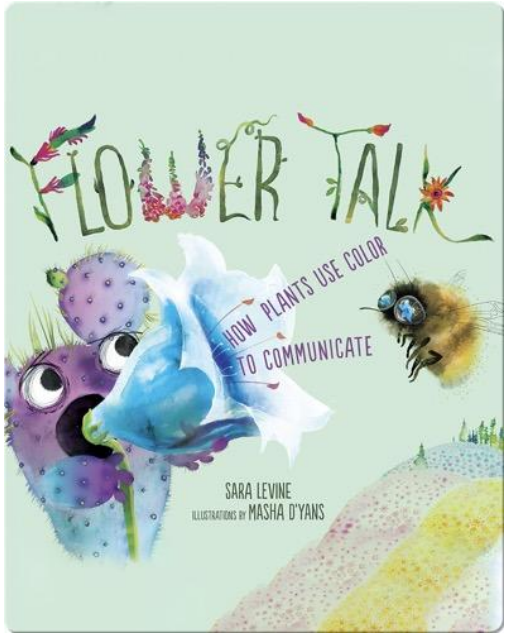
Books on Epic





Stretch Concepts





Online Read Aloud

Videos

SEED DISPERSAL METHODS

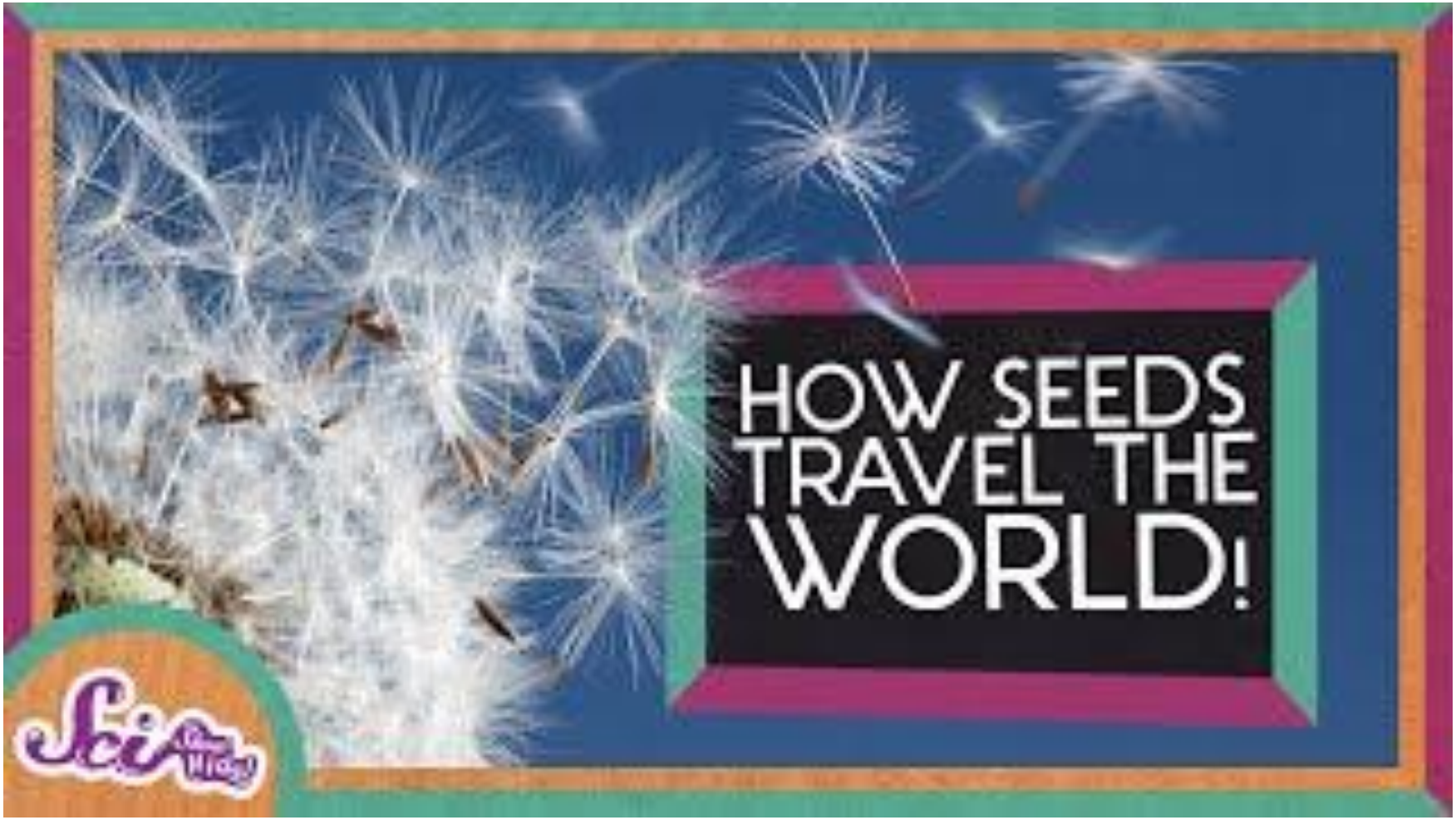
Name: _____

Directions: Using the website, describe each method of dispersal and give an example of a seed that uses that method.

Link: http://bit.ly/3o8SJsk (type it in the bar!!)

Wind	
Water	
Animal	
Explosions	
Fire	

Free TPT
Graphic Organizer
to go with videos

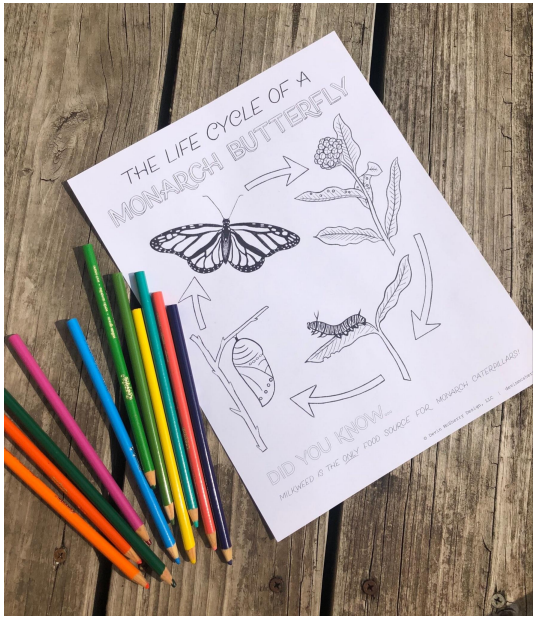

HOW SEEDS
TRAVEL THE
WORLD!

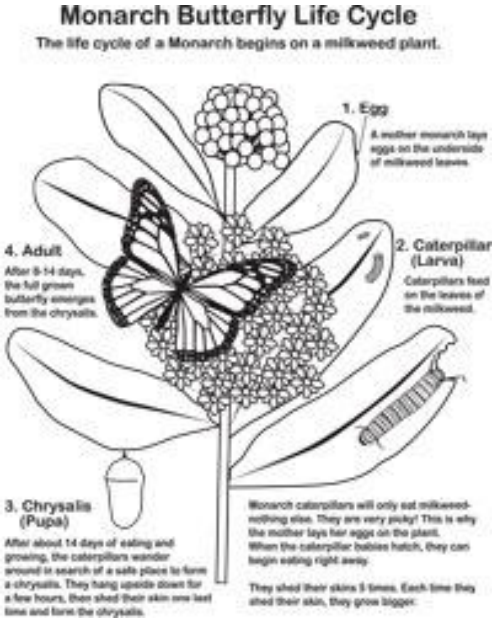

How Seeds Move !

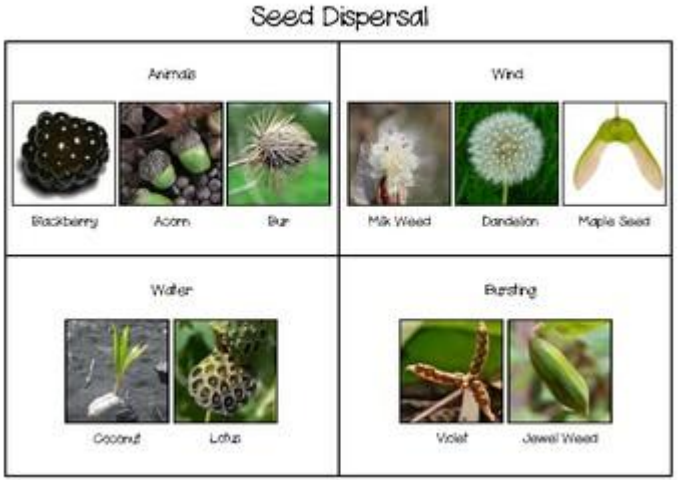

NGScience
Seed
Dispersal


DISSEMINATION
OF SEEDS

Milkweed/Seed Activities



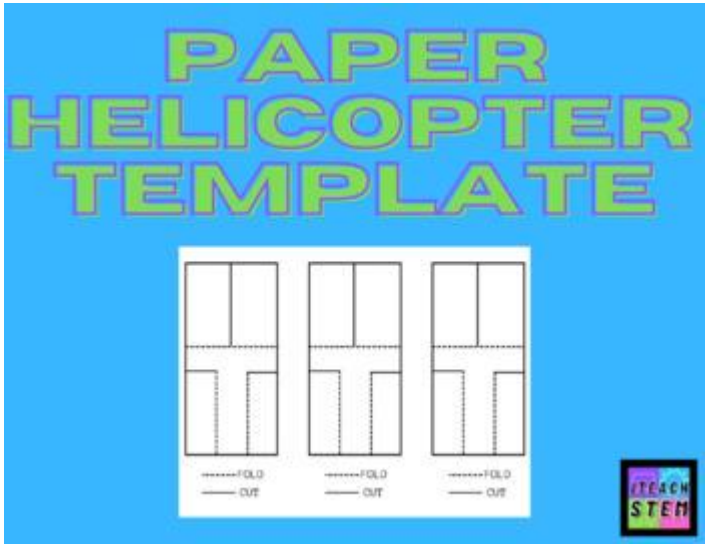




Coloring Pages

Free TPT Cut & Paste Sorting

Seed Dispersal STEM Challenge



Free TPT Helicopter Template

Community Circle 2: William Beebe

During this session, our principal read aloud the section on William Beebe and re-read the ending. After sharing a few noticings and wonderings, she read the biography in the back of the book.

Teachers were encouraged to do a follow up lesson using one or more of the resources provided.

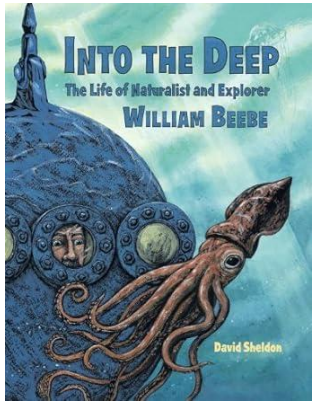
For a whole school activity, students watched a fulldome show about ocean exploration inside an inflatable dome.

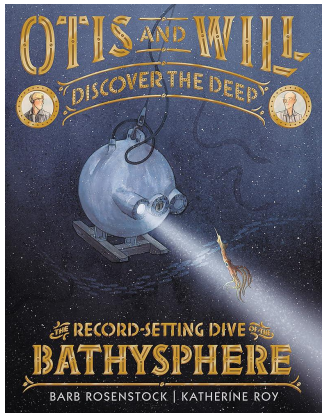
In the library, we focused on deep ocean exploration.

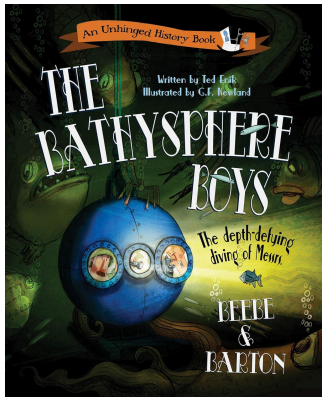
Notes:

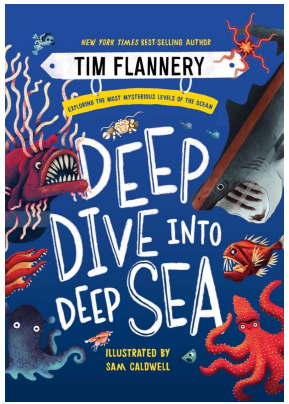
- William Beebe was our biggest surprise as none of us had ever heard of him and he was such a big deal in his time. The kids were really captivated by the idea of being plunged into the depths of the ocean in an iron ball. It was definitely my favorite lesson!

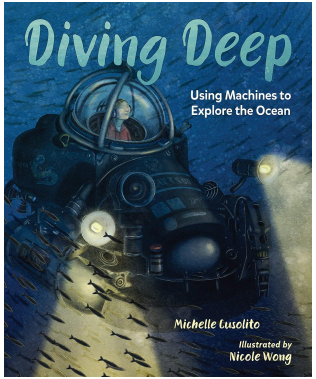
Book Suggestions:

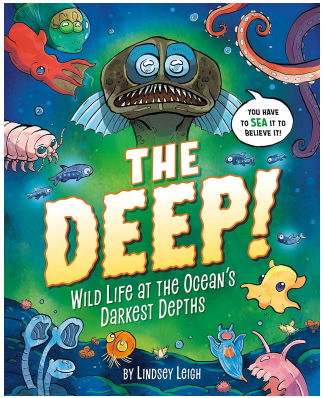






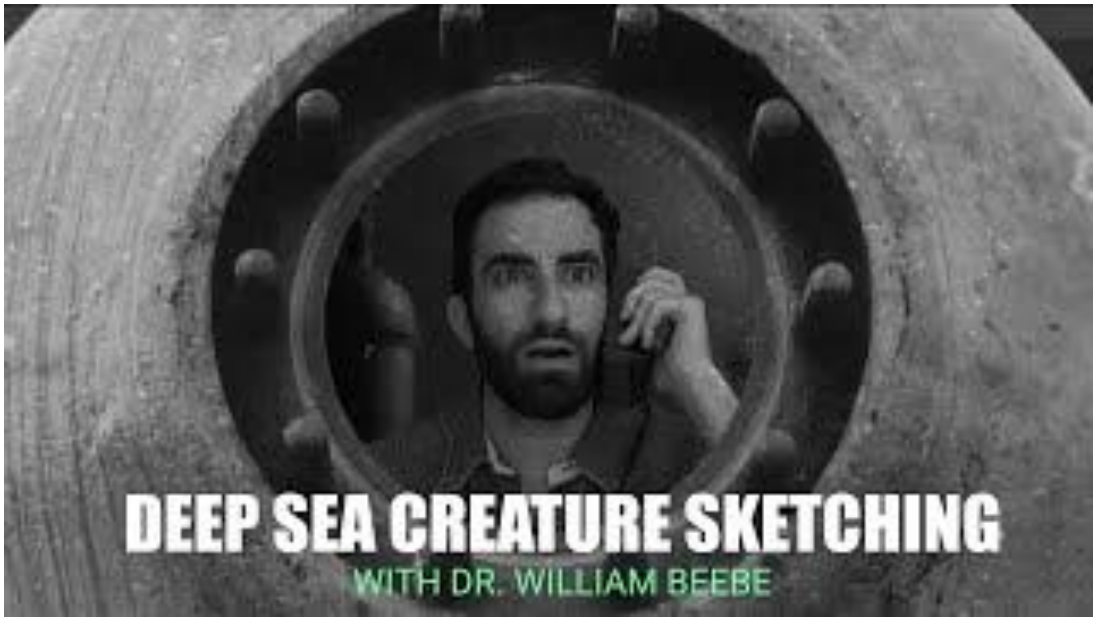






Video of Bathysphere

Reenactment of How Beebe Described What He Was Seeing to the Surface



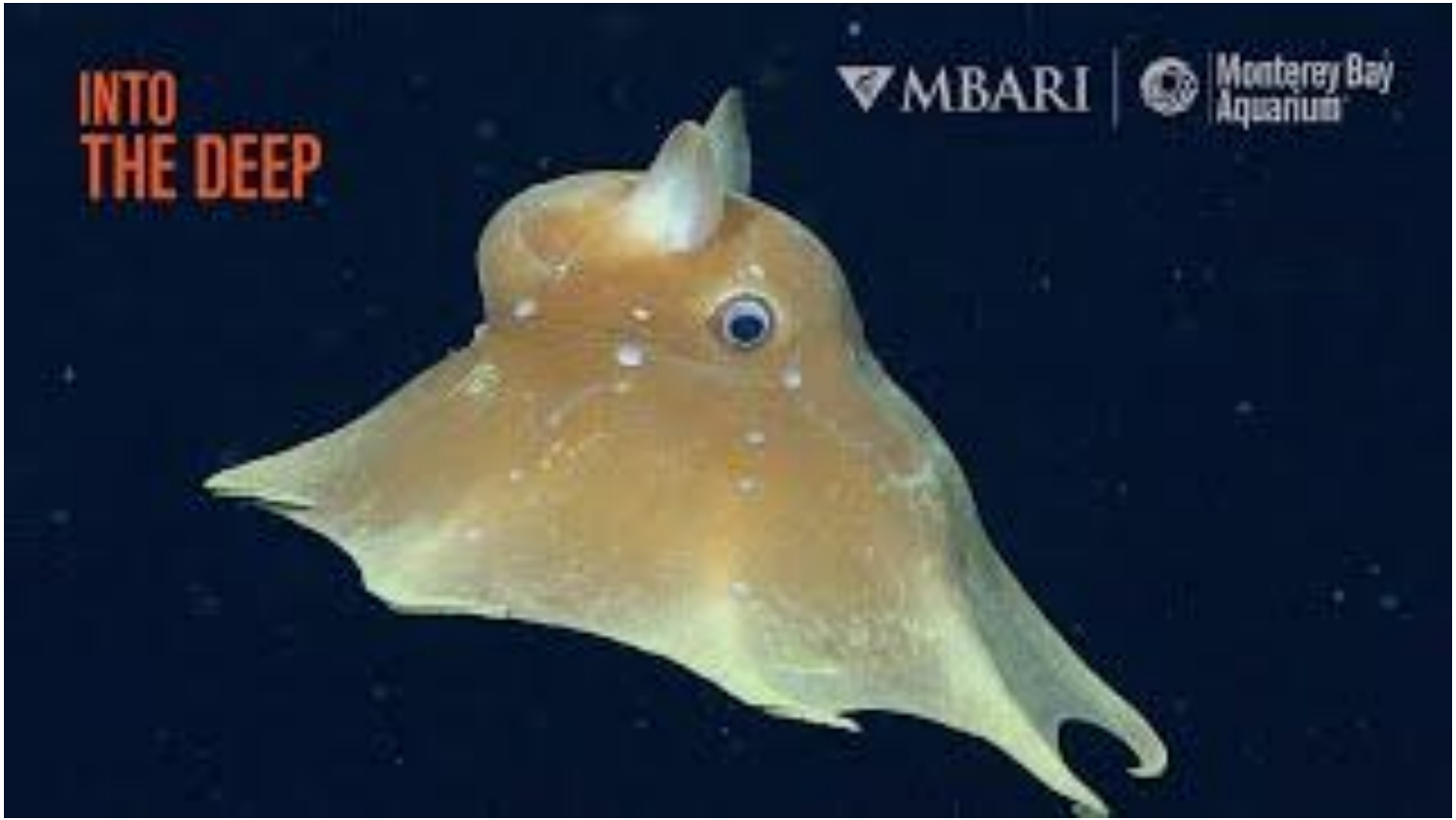

Let's explore the
ocean


LAYERS OF THE
OCEAN


THE
OCEAN
LAYERS

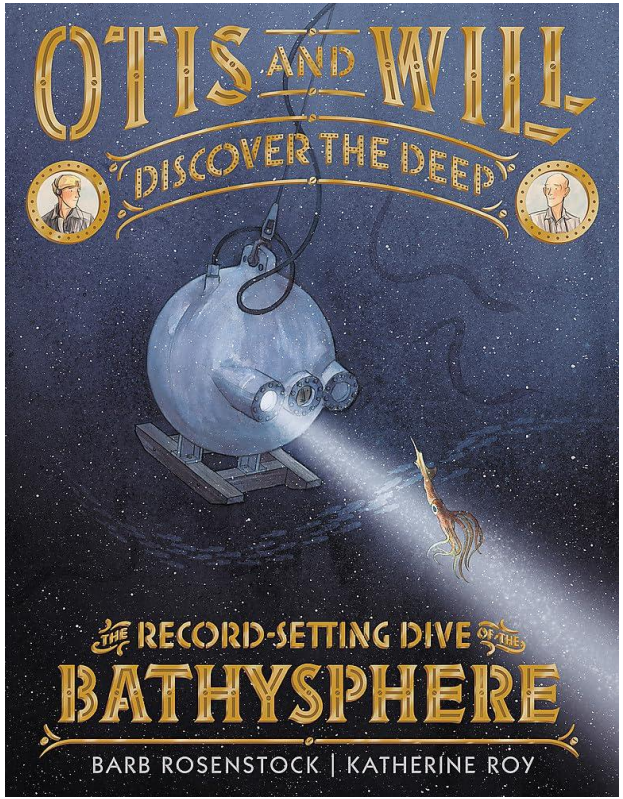

GLOWING
ANIMALS!

Interview with Deep Sea Biologist



Into the Deep Read Aloud
(with cool stuff at the History of Diving Museum)

Author Talk (1 hour)



Featured in:

Otis and Will Discover the Deep

[Watch Her Speak Here (46:00)]

Note from Constance Carter,

Former Head, Science Reference, Library of Congress

William Beebe would have loved this book. Nothing made him happier than encouraging children to explore the wonders of nature and science. And I should know. When I graduated from Smith College with a degree in zoology, my advisor pulled a letter from Beebe out of her bottom drawer, which stated that he sometimes took a recent graduate in zoology with him on expeditions. I applied, interviewed for four hours, and became Beebe's assistant at his field station in Trinidad in the Southern Caribbean! Part of my job was helping him with his correspondence. He'd toss letters from well-known scientists aside so he could answer letters from children, saying that scientists could wait; the opportunity to inspire a child was more important. He'd often suggest observations to make or experiments to do, and ask the children to write back. He inspired me to help children in my career as a science librarian, and this fine book carries on his legacy of stimulating the curiosity of children and capturing their imaginations.

Think About It!

What does this quote mean to you?

“The is-ness of things is well worth studying; but it is their why-ness that makes life worth living.”

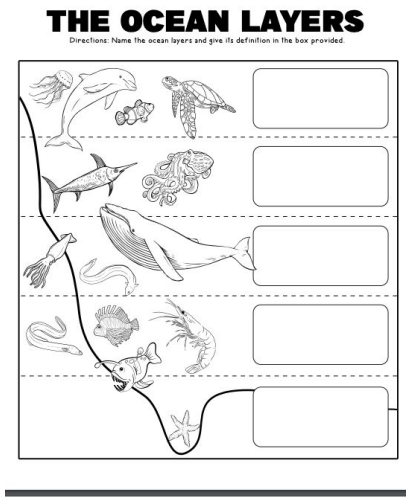
-William Beebe

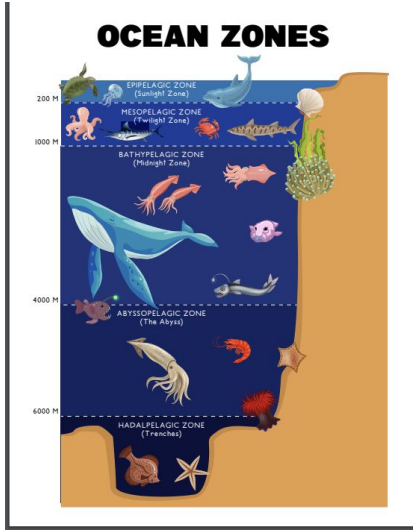
Explore the ocean with Dr. Robert Ballard and the Corps of Exploration

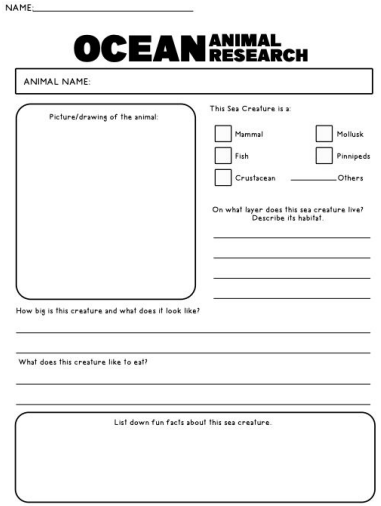
There is much to see on the Nautilus Live site, but the live feed of current research is really cool!

Free Printables

Ocean Info, Animal Research Page, Crossword Puzzle, etc.





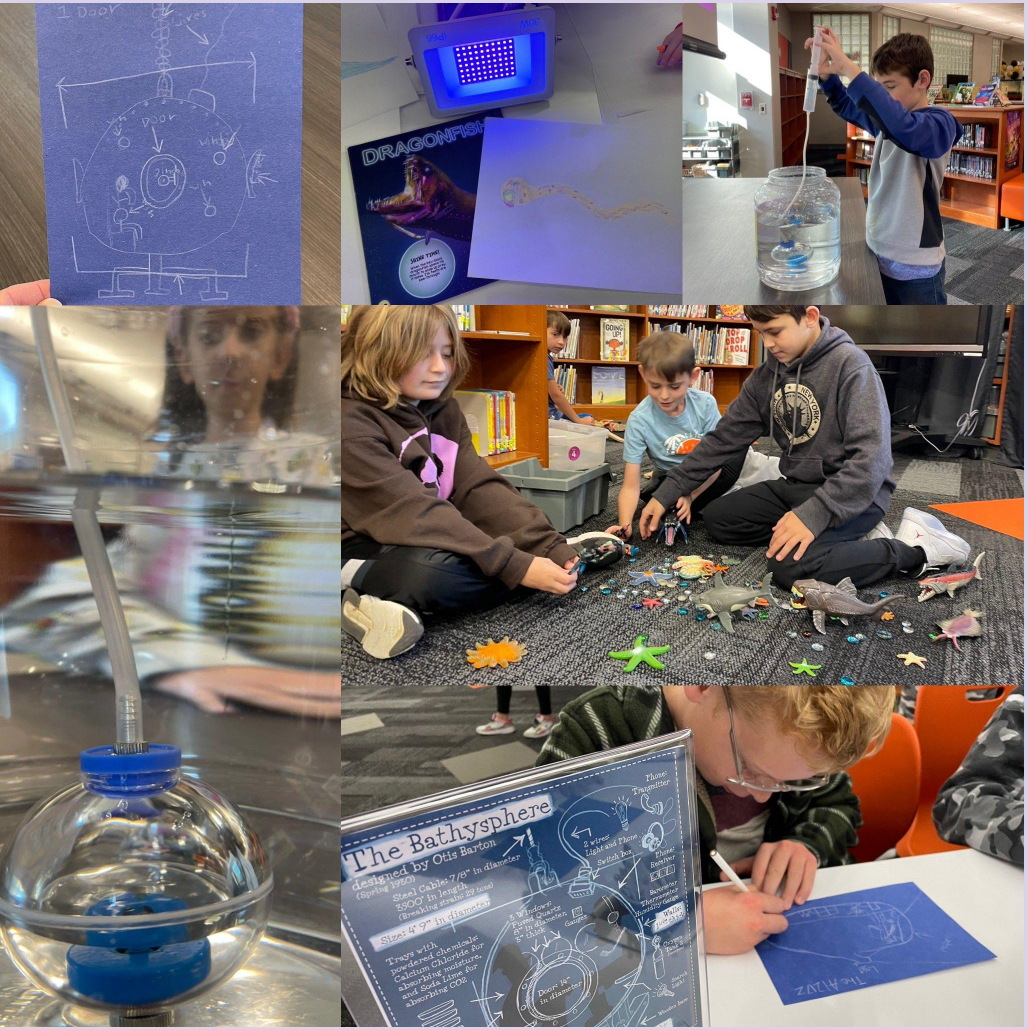


Whole School Activity: Fulldome Deep Sea Show

Our district has access to a mobile planetarium system. I used this system to show snippets of Into the Deep which featured the Bathysphere. For our younger students, I created a simple Canva presentation on Ocean Layers that still gave them an “under the sea” feel but was more age-appropriate.

Notes:

- Do a Google search to see if you have access to a Mobile Planetarium. Many regional education service centers will have them or local universities will rent them.
- While this turned out to be one of the coolest things we did, it was a right time/right place situation. I’d just attended training for the system and then decided to try it out with a fulldome show.
- This activity can be adapted to whatever technology you have on hand– VR, iPads, projectors. You can even purchase an ocean laser projector for your classroom.



Library Activities

- **Bathysphere Blueprints:** Students used white color pencils on blue construction paper to design their own deep sea submersibles.
- **Deep Sea Drawing Game**: Students paired up to emulate how Beebe described animals to artists over the radio broadcast. One student had a photo and had to describe it to another student who was the artist. For extra flair, we used neon crayons and black lights.
- **Plastic Sea Creatures**: Students could create deep sea playscapes with these animals.
- **Cartesian Diver**: Students could experiment with submersible science with this Cartesian Diver ball.
- Since this lesson, I found this simple Cartesian Diver experiment.

Community Circle 3: Charles Darwin, Meg Lowman, Diego Cisneros-Heredia

During this session, the author of the book, Heather L. Montgomery, joined our virtual Community Circle and read aloud the sections on Charles Darwin, Meg Lowman, and Diego Cisneros-Heredia. She then led our students in a sorting activity.

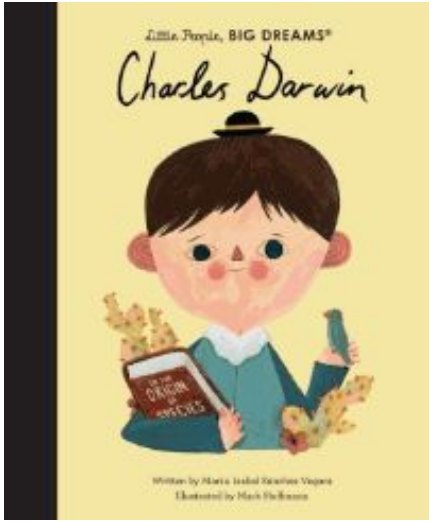
Teachers were encouraged to do a follow up lesson using one or more of the resources provided.

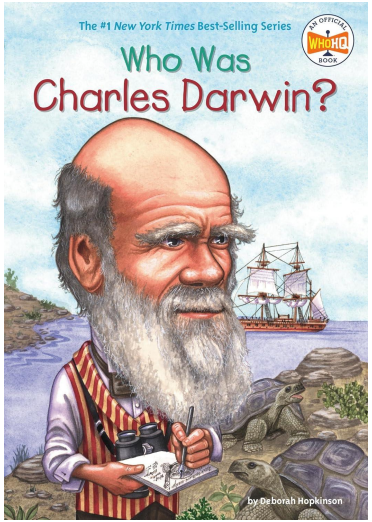
In the library, we explored bins for scientific sorting.

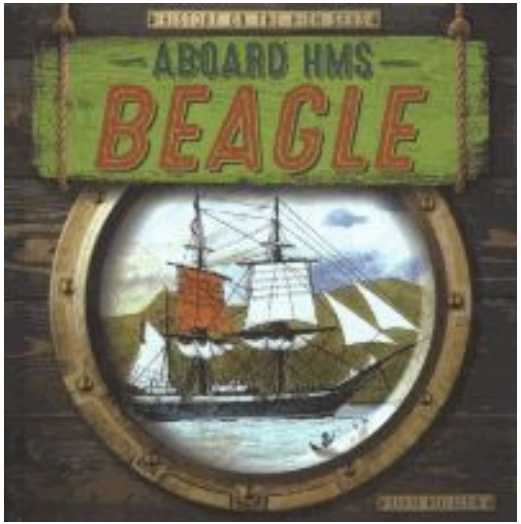
Notes:

- Due to unforeseen circumstances, we fell behind in our plans. To account for this, we postponed our Jane Goodall session and combined these scientists into “The Collectors”.
- As it was the end of the semester, we did not study these scientists as thoroughly as the others.

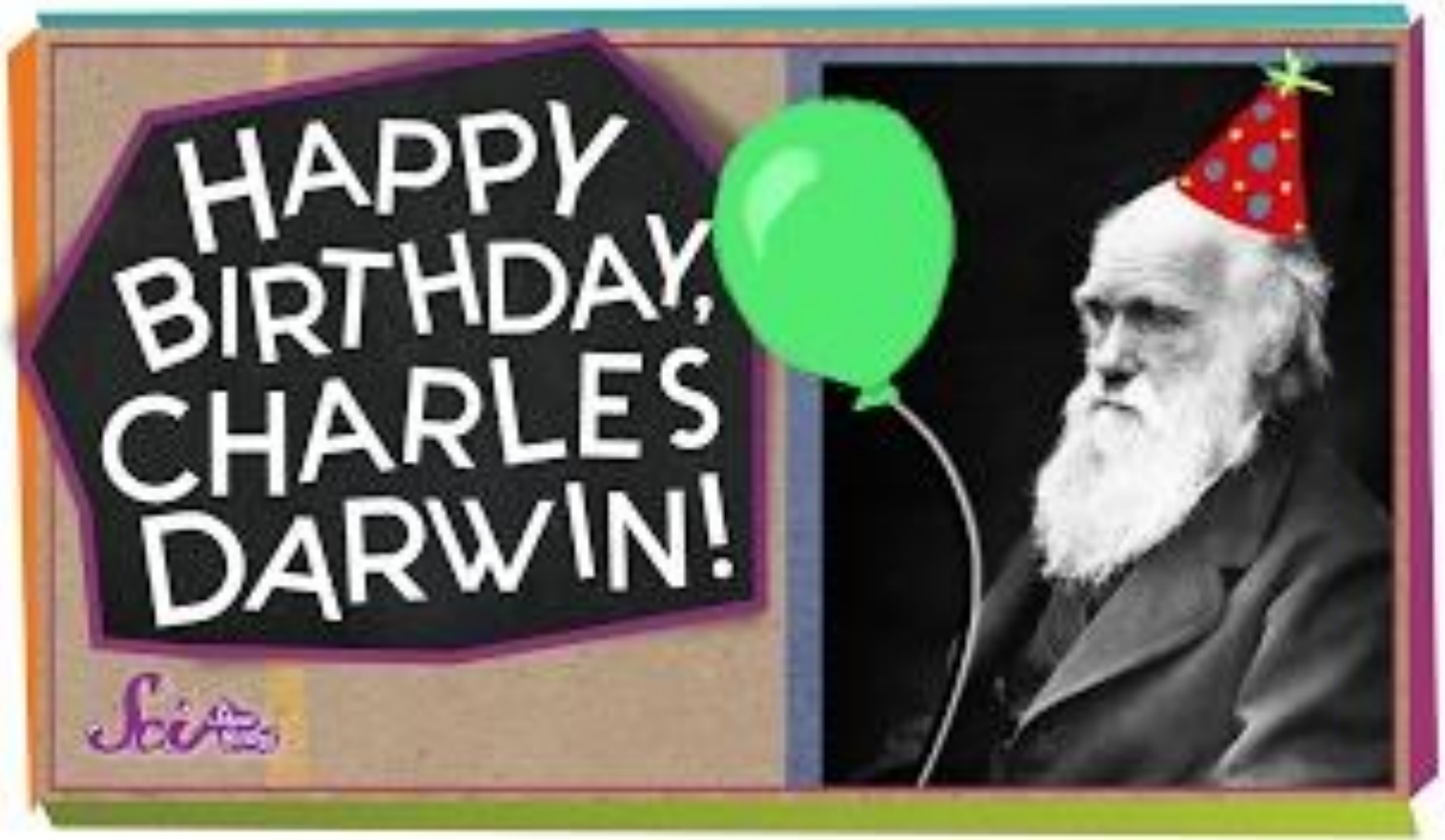
Book Suggestions:







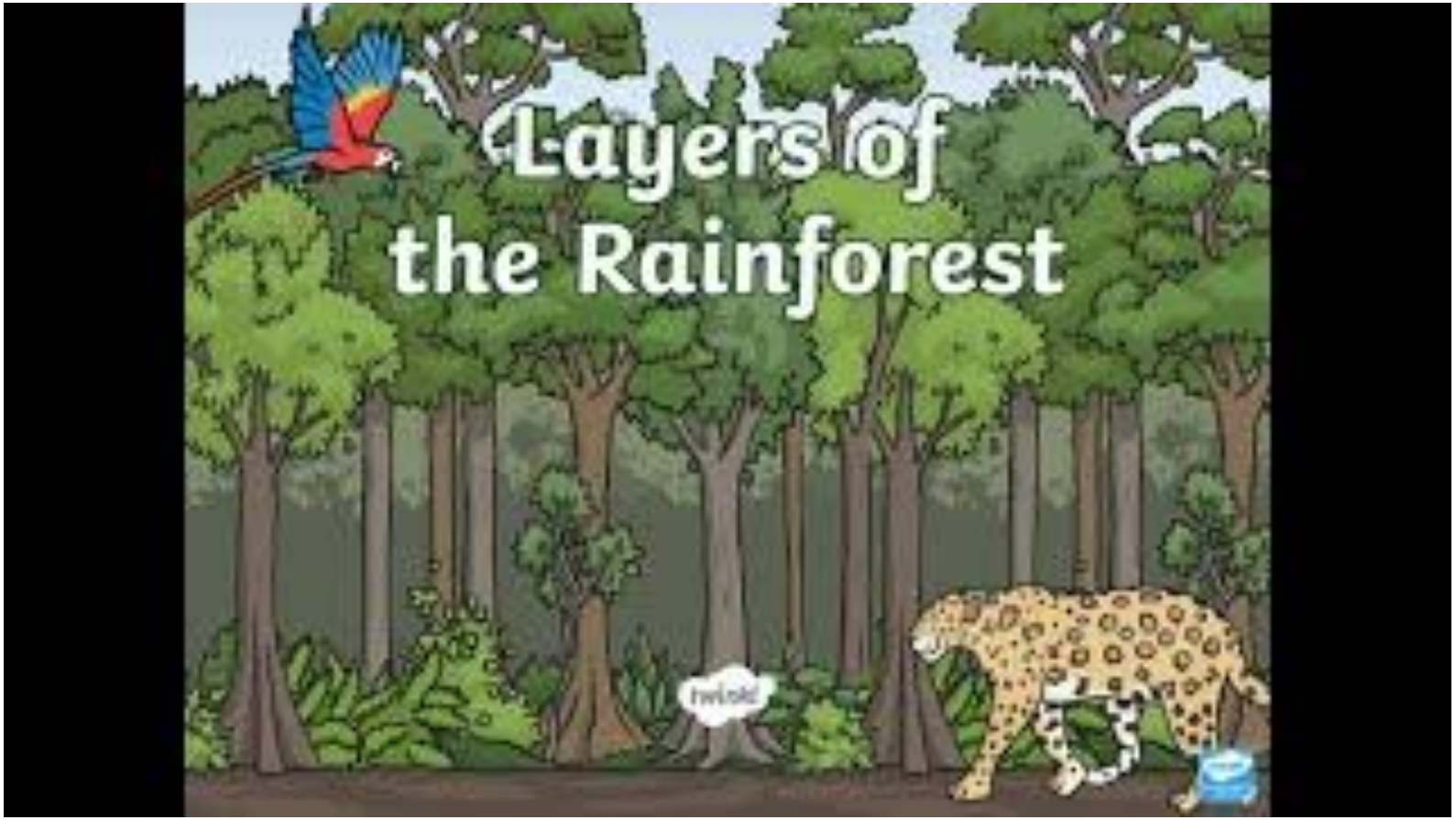
Books Available on epic!


HAPPY BIRTHDAY, CHARLES DARWIN!

Galapagos Song (3:30)

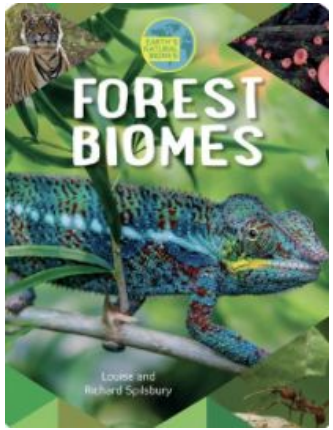
Canopy Meg’s website

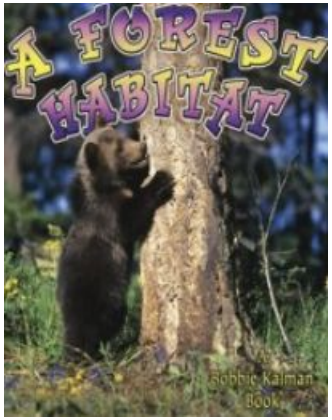
Nat Geo: Meg Lowman (2:30)

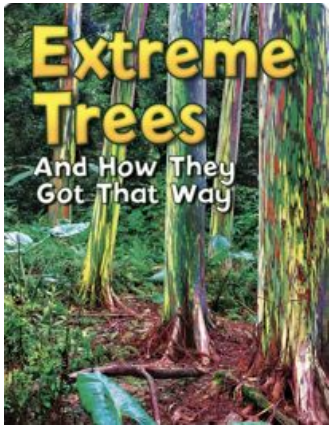


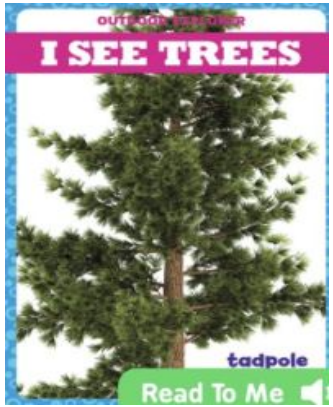
Layers of the Rainforest (3:49)

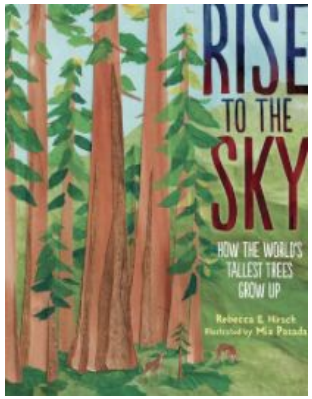
Forest/Tree Books on epic!

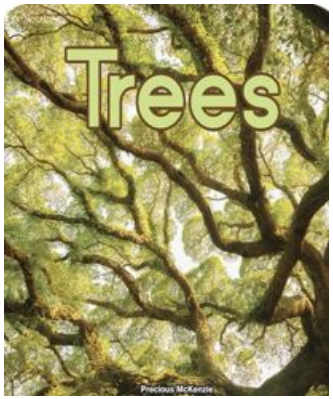


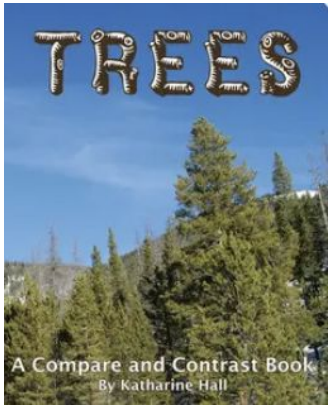










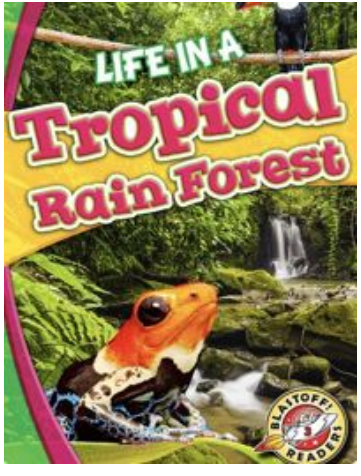


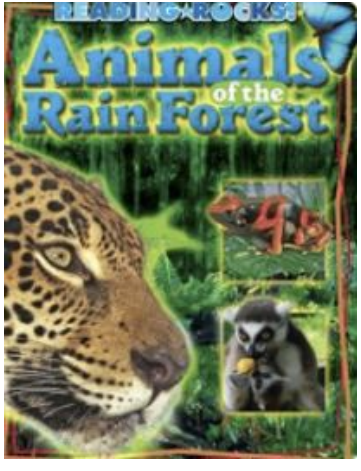
[Interactive Map of Forest Walkways]

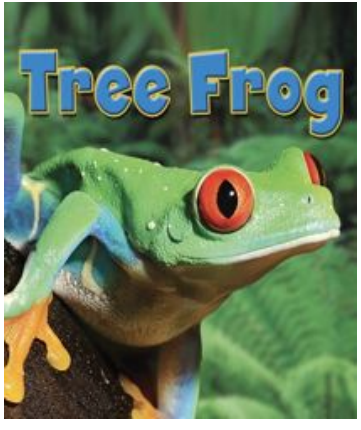
From Wikipedia:
He grew up in Ecuador and from an early age was interested in natural history. By the age of 10, he was collecting data on birds. By 17, he had already discovered new species of frogs. After many years of research and education, he is now a professor and director of his university's museum of zoology. He continues to do research and advocates for the rain forest ecology.

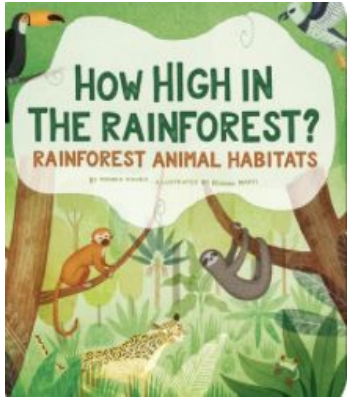
Diego Cisneros-Heredia's website
(in both English & Spanish)

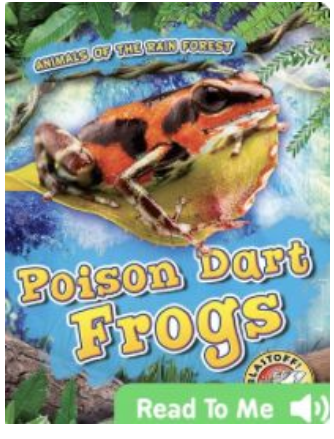
Books about the Rainforest on epic!











Rainforest Song (3:30)

Whole School Activity: Virtual Author Visit

Heather L. Montgomery joined our virtual Community Circle to read aloud from the book and to lead the students in a sorting activity.

Library Activities

We did a lesson on animal classification and then had bins for students to play with. Bins included plastic animals with classification charts, seashells, living/non living things, and rocks and minerals. Some of these bins we have as regular parts of bin time so we invited students to think about them differently and to share their sorting methods with us.

Community Circle 4: Jane Goodall

During this session, our principals read aloud the Jane Goodall section as well as the end. After some discussion, they read the biography in the back.

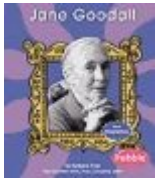
Teachers were encouraged to do a follow up lesson using one or more of the resources provided.

In the library, we created primate habitats.

Notes:

- Jane Goodall was probably our most popular scientist. The kids really connected with her and spent many more months building habitats with our bin supplies.
- We did not do a Whole School Event this session as we were hosting our Family Science Night during this timeframe.

Book Suggestions:


Books Available on epic!

See Also Jane Goodall's Scrapbook that provides photos & stories for inference, main idea, etc.


JANE GOODALL &
CHIMPANZEES

More current interview

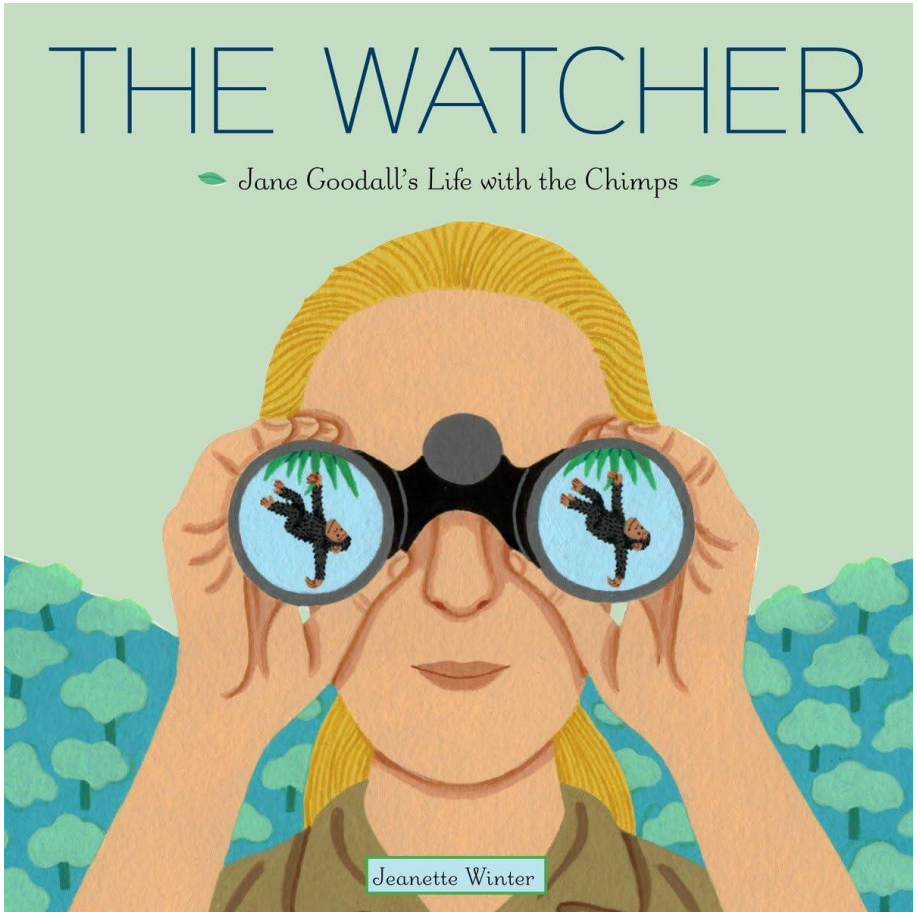
Great intro video with interview (15:00)
(Note: I'm using part of the Nat Geo intro video for 5th Grade Library)

Great Interview to help kids think through environmental issues. (5:30)

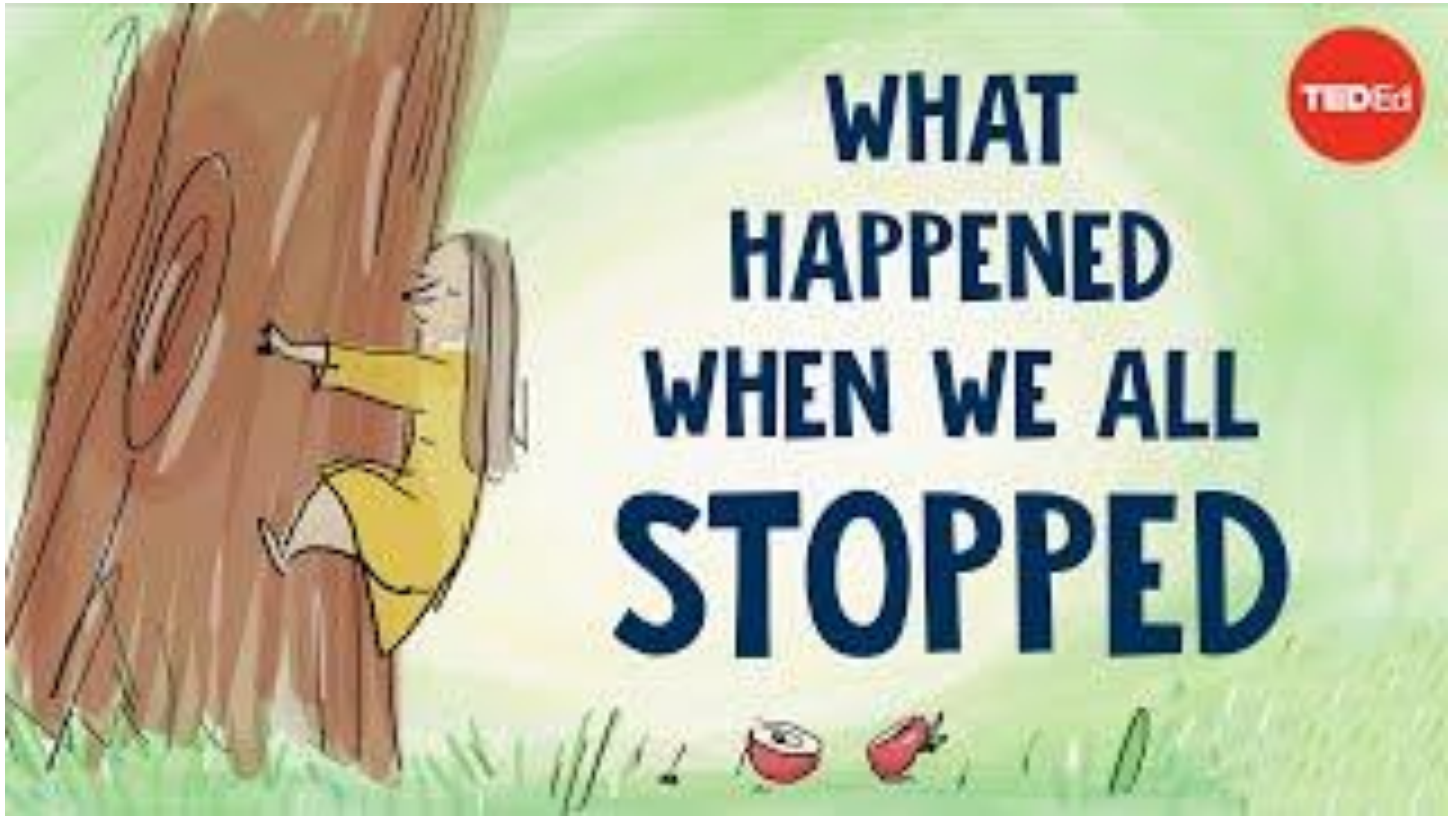
Interview with Jane (5:25)

Me…Jane read aloud by Jane Goodall (7:00)

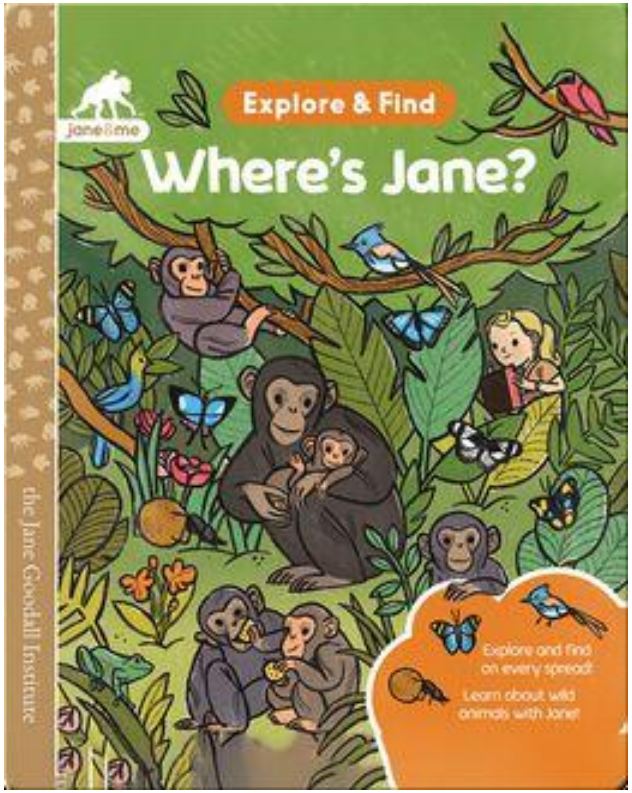
Read Aloud of Little People, Big Dreams Biography (5:01)



The Watcher
Animated Story
On Epic



Jane Goodall narrates the poem. (3:20)



Indoor Recess Fun: Seek & Find Book

https://www.getepic.com/app/read/76782

More Read Alouds with Jane Goodall

https://www.youtube.com/playlist?list=PLBp2NCth7bOZbLv-8cWzFHDKEyxpusd-7

Wildlife Drawing with Jane Goodall Institute

https://www.youtube.com/playlist?list=PLBp2NCth7bOYkSnD-55d33thnKk66aGO-

Becoming Jane Virtual Exhibit

https://www.youtube.com/playlist?list=PLdiqWK-4jVXr5xVn7VkHwJXgpSTn5xcv2

Whole School Activity: Family Science Night

As we have an annual Family Night during this time of year, we opted to not do a Whole School Activity for this session. Students and their families were invited to join us in “Exploring Our World” at a free evening event.

Library Activities

After watching one of these interviews with Jane Goodall, students were invited to create primate habitats.

Community Circle 5: Mary Anning

During this session, our principals read aloud the Mary Anning section as well as the end. They also read aloud The Dinosaur Lady.

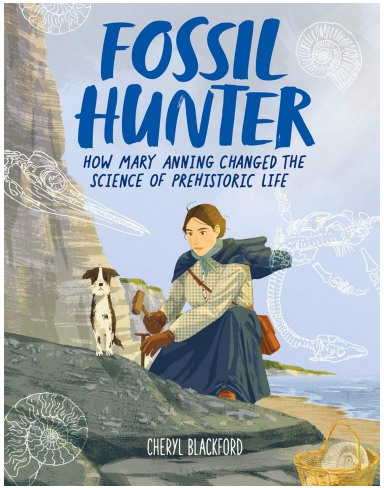
As we were entering a testing schedule at this time, we did not ask teachers to do anything in their classrooms. Although, to our good fortune, Scholastic News featured her around the same time.

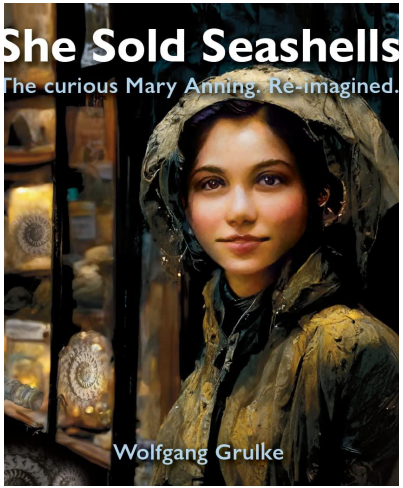
In the library, we focused on fossils.

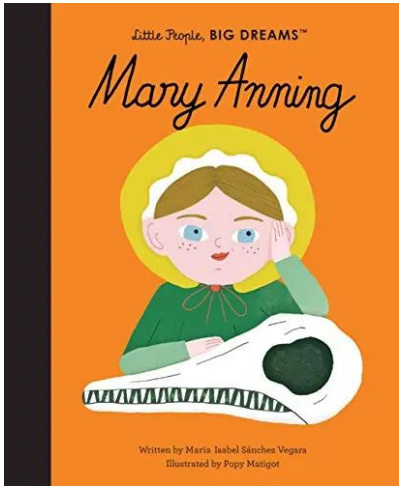
Notes:

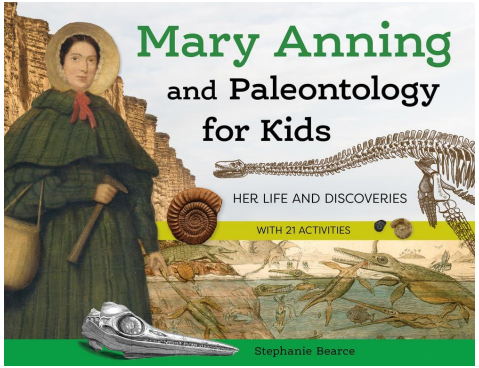
- Mary Anning's life really fired up the students. She was struck by lightning! She had to work instead of going to school! She wasn't allowed to present her findings! They certainly felt indignant on her behalf. And then you add in coprolite and they were all in!

Book Suggestions:









[Books Available on epic!]

Whole School Activity: Fossil Sorting

Because we were in our testing window, I visited classrooms to do a fossil sorting activity. We connected this to our place-based studies in which we discussed the geological time we were an ancient sea. We used these Fossil Kits.

Library Activities

We had a brief lesson on Mary Anning's life and then watched a video about her study of coprolite. Then we had bigger fossils and coprolite to observe. We used these kits.

During this time, we were also learning about the animals that lived in this area during the Ice Age so we had a whole fossil theme going. For those lessons, we did a fossil dig which would be a fantastic activity for this unit as well.

Our older students had been learning about circuits so when I learned that Anning had been struck by lightning, I wanted to show them how electricity can flow through a person. We bought a Lightning Rod which allowed them to explore making a human circuit. We even made a giant circle to see if it would still work (it did!).

Community Circle 6: Maria Sibylla Merian and Bonnie Lei

Our final session found us in another testing window so I read the final portions aloud to classes during library. We learned about both of these women and compared how science has changed for women over time. We also re-read the ending and talked about what the author meant by asking, “What’s in your pocket?”

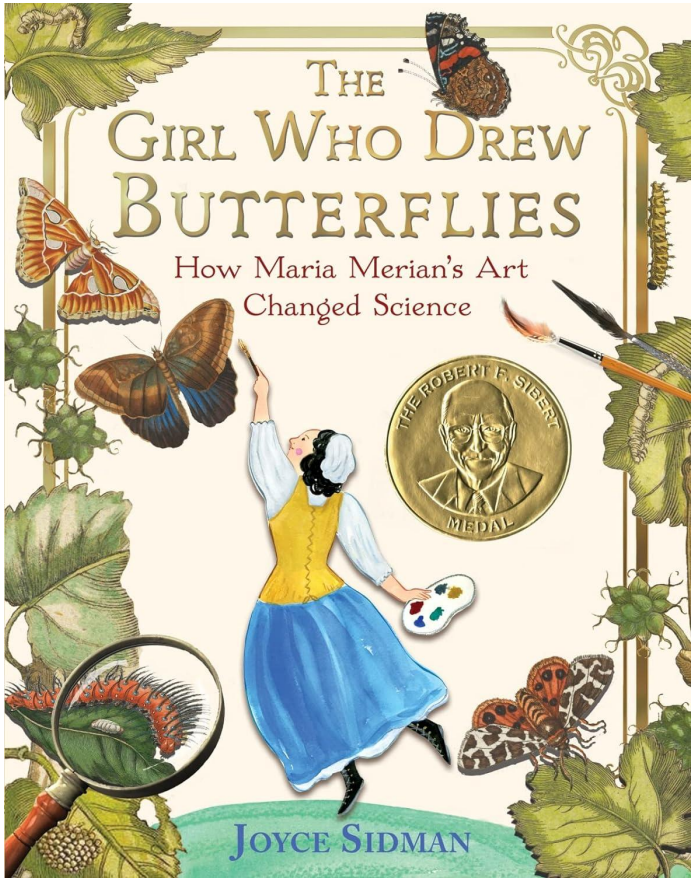
We used this lesson to promote our Collections Night in which students were invited to display their own collections during an evening event. We also hosted our annual Nature Museum in the library.

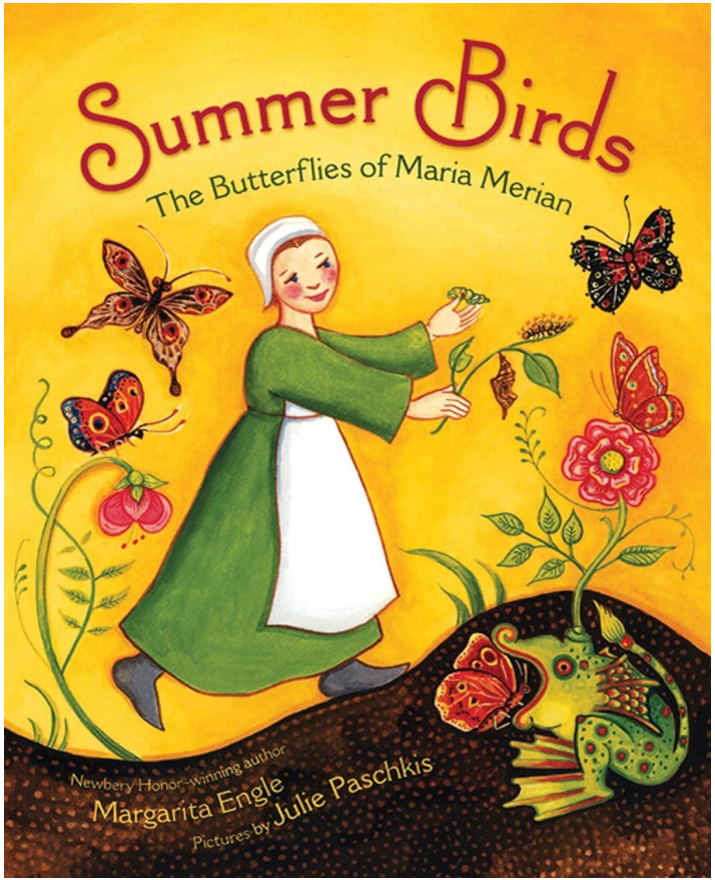
We did look into Absolute Science’s Butterfly Tents as a Whole School Activity, but we did not have enough time to make it happen. If you are in the midwest, I do recommend checking it out as they will bring a butterfly experience to you!

Notes:

- The students were so surprised that their “common knowledge” of insect life cycles wasn’t always so common!
- For younger students, we talked about Then & Now.
- The older students were inspired by the fact that Bonnie Lei had already made discoveries in high school!

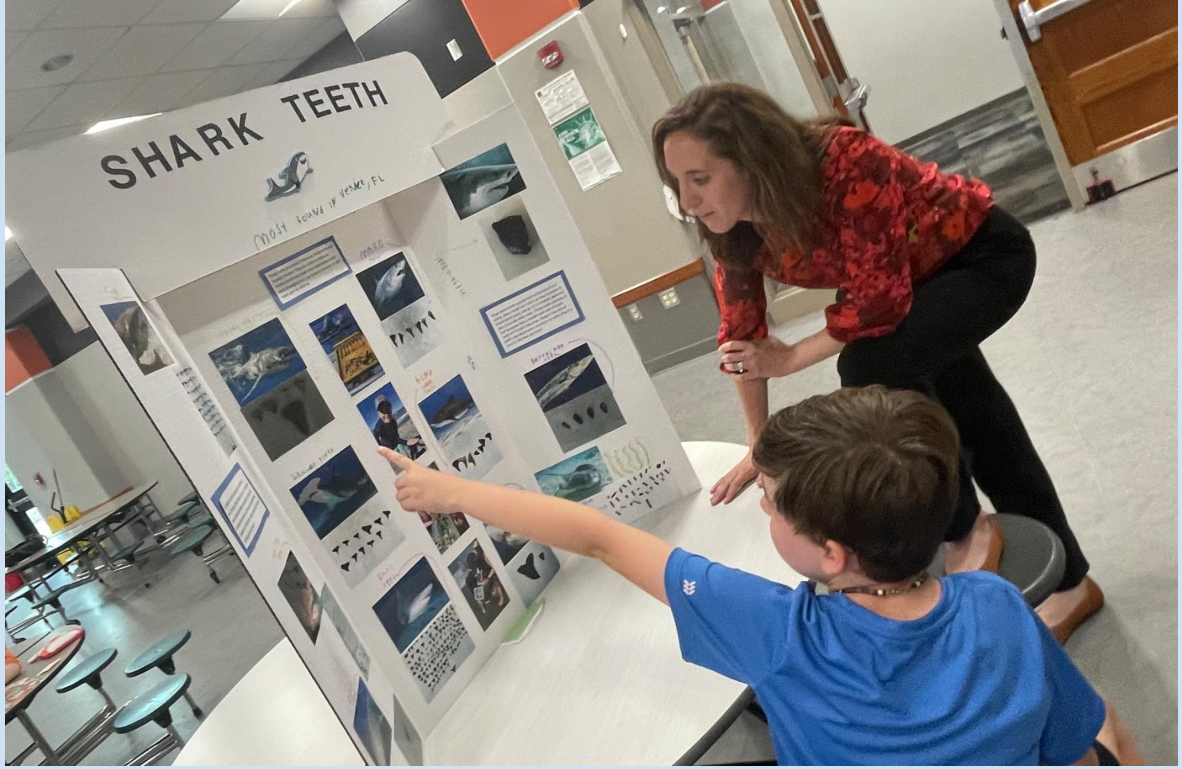
Book Suggestions:





Whole School Activity: Nature Museum

Through donations and purchases, we have put together a lovely selection of natural items for students to peruse. This is one of their favorite events!



Whole School Activity: Collections Night

We invited students to share their collections during our Collection Night event.

Library Activities

Most of our library time was spent reading the final portion of the book. After reading the book, we used these slides to compare and contrast.

For the weeks to follow, we had various insect bins for students to play with.

Conclusion

We had a wonderful year learning how these scientists used their own backyards to study and explore! It was a fantastic opportunity to introduce phenology and placed-based learning.

I was pleasantly surprised by how much our students retained about the scientists. While names were sometimes forgotten, they remembered what the scientists had studied as children and as adults. They were very animated about how science has changed, especially for women, and reiterated the point that what we think of as common knowledge now was once a revelation. It really made them stop to think about what their generation might discover.

If you have questions, please contact me at taryn_hassler@nobl.k12.in.us. You can also follow me on X @tarynhassler.