



## Cutting carbon can help the planet

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The world is in serious danger. If our society does not try to limit the amount of carbon we emit, there could be serious consequences. Every year, about 43 billion tons of carbon gases are released into the atmosphere, which causes things like climate change to get worse.

Climate change results in the death of animals, weather conditions becoming more severe, and the increase in sea levels.

Thankfully, there are three effective ways to take carbon dioxide directly out of the atmosphere that might just save our society.

Firstly, the cheapest method of capturing carbon is restoring natural ecosystems. Natural

ecosystems are known as “carbon sinks,” which is just another way to say that they absorb carbon naturally. These ecosystems include plants using the carbon dioxide as food in photosynthesis, and then producing oxygen as a byproduct.

According to Lawrence Livermore Labs, over 90% of the land in California is workable land, which means that trees and other

plants can be placed there. This gives plenty of space for plants to be planted in most of California, not to mention the other states with lots of land.

This method is the cheapest, but is still very effective, and both developed and developing countries could benefit from this method because it removes

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## Finding fossils along the Mokolumne

An interview with EBMUD park ranger Greg Francek

**Jacqueline Verdoza and Alexandra Geronimo**  
JOE SERNA JR. CHARTER SCHOOL

On April 19 we got the opportunity to interview the man who has found the most recent fossils in California, Mr. Greg Francek. We were able to ask him a couple of questions. Let's find out if one of your questions was answered.

Although we couldn't meet him in person we did have the opportunity to talk to him via Zoom. Our questions were separated into topics.

The first topic we touched on was about how many fossils he's found in the past and how rare it is to find a fossil in the area. He replied by saying that he had found some fossils in the past. He also mentioned that it wasn't rare to find a fossil because there are many kinds of fossils. For example, there are tree fossils, shells, and as we know, animal fossils. He showed us a fossil of a camel's foot.

Now, we also wanted to find out some things about him, such as his education and former training. One of the first questions we asked on this topic was, how and where did he learn to properly excavate fossils? His answer was that he learned by experiencing it first hand. He stated that he gets a university level education every time he works. You also don't necessarily need an education to do this kind of job. All you need is curiosity and the process of looking closely and

PLEASE SEE FOSSILS, PAGE 5

## Pollution affecting the Mokolumne River



KIMBERLY JACOBO SOLANO/HERITAGE ELEMENTARY SCHOOL

The Mokolumne River is being polluted and facing a drought. Good and bad changes can occur. If pollution continues, it can have a negative impact on the plants, animals, and people around it! That is why we need to reuse, reduce, and recycle to help our community.

## Salmon in the classroom teaches about fish's life cycle

**Sarah Krutka**  
TURNER ACADEMY

Salmon are interesting in unique ways. One interesting fact about salmon is that the females lay 5,000 eggs and then they die. They swim in schools. One hundred thirty-seven animals depend on salmon. They have a yolk sack under their body that gives them nutrients. They are capable of changing colors. They swim 1,000 miles in the ocean. They travel a long way from freshwater to saltwater. When the mother lays her eggs, she dies after spawning. They have six life cycles: egg, alevin, fry, parr, smolt, and adult.

The first life cycle stage of salmon is the egg stage. The female lays up to 5,000 eggs. Birds and other fish are threats during the egg stage. The mom uses her tail to cover her eggs. In my opinion, the most interesting thing during this stage is their yolk sac that gives them their needed nutrients.

The third and fourth life cycle stages are the fry and parr. They stay

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## Marine Science Institute gives a hands-on look at the wonders of San Francisco Bay

**Isaiah Mansaray**  
JOE SERNA JR. CHARTER SCHOOL

Me, my classmates, my Spanish teacher Mrs. Azevedo, and my science teacher Ms. Jacinto have been able to go on the MSI trip at the San Francisco Bay.

For those who don't know, the MSI trip is an amazing trip where students from all kinds of schools and grades are able to experience the wonders of the San Francisco Bay. From where we are now (Lodi, California) it takes an average of four hours to get there and back, but every second was worth it.

The trip there was entertaining for

sure, but that was nothing compared to the experience we had on the boat. Once we got there we sat down and ate lunch. Besides finding a dead crab and dog coming over to say hello, nothing too interesting happened while we were waiting.

It was finally time. We got our life jackets and we boarded the ship. Once inside, we got the breakdown of what was going to happen.

They explained to us the safety rules and what to do in case of an emergency, after which we got time to explore the inside of the ship. I guess it was a little more

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## A visit to the San Joaquin County Historical Museum

**Sarai Teran Rivera and Oscar Vijul**  
HERITAGE ELEMENTARY SCHOOL

On Tuesday, April 5 our class visited the Cortopassi Avansino building at Micke Grove Park. We learned about innovations in agriculture and crops from our area, including walnuts, cherries, beans, tomatoes and asparagus. We will tell you facts about our favorites, walnuts and cherries.

### Walnuts

Did you know that in the past, walnut trees were shaken or hit by people to remove the walnuts? Now there is a machine that grabs and shakes each tree so that the walnuts fall off and can be collected.

Did you know that the



SARAI TERAN RIVERA /HERITAGE ELEMENTARY

Central Valley is California's best walnut growing region? Walnuts are a multimillion-dollar industry in California.

### Cherries

First the cherries are

picked from the trees. Then they are taken by trucks to be processed. Next, the cherries are sorted by color and size. Finally, the cherries are packaged and ready to send to stores.



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## Where do ash and pumice end up after an active volcano?

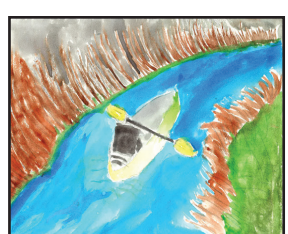
**Sofia Chan**

JOE SERNA JR. CHARTER SCHOOL

Initially, what are ash and pumice? Ash and pumice are developed from the eruptions of silica-rich magma, a type of gas that later on expands due to the increasing pressure, which later on escapes and becomes a sticky magma.

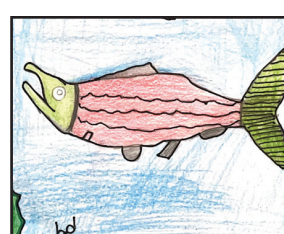
After that, it later expands farther away from the volcano, which then eventually washes into the streams, for example, at the Miocene Zoo.

For a visual representation, I've made a volcano model to further represent where ash and pumice end up.



## Poetic tribute to the Mokolumne

After a kayaking trip along the Mokolumne, students wrote poems and painted vibrant watercolors paying tribute to Lodi's river. **3**



## Fantastic fish, colorful cranes

Young artists depict Sandhill cranes and salmon in a variety of media, including colored pencils, watercolors and painting with the fish itself. **6**



## Clean up Lodi's watershed

Learn how to reduce carbon in the atmosphere, turn recycled trash into fun crafts, and find other ideas for helping the local watershed. **2, 8**