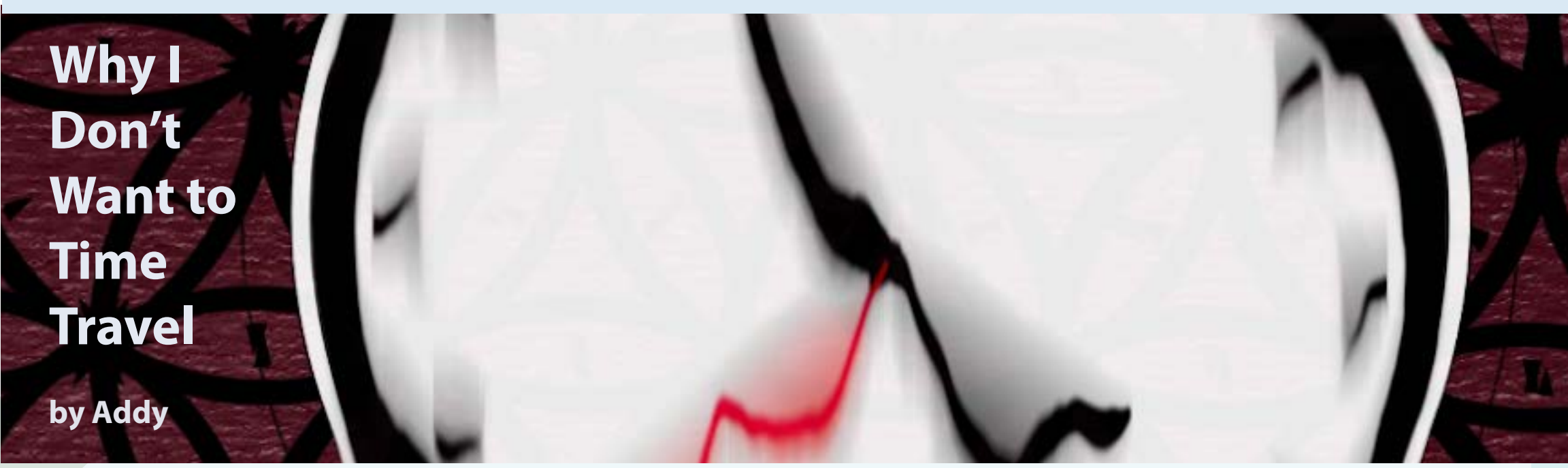
CH Tree Times

Writer's Edition

Edition 13, December 2020

Throughout this semester, many of the Seniors have been writing, both creatively, through stories and poems, and in formal writing, such as essays and reports. It is my honor to have had the privilege of watching them shape their work, from its first draft, to its finest form. I hope you enjoy reading their wonderful, creative works. Many thanks to Mr. Faulkner for doing the work of putting this collection together for all of you to see and read.

Mrs. Sexson



Why I Don't Want to Time Travel

by Addy

One way for time travel to work involves what I believe is called special relativity. Let's say a car is going down the road at 30 miles per hour. If you were sitting still, the car relative to you is going 30 miles per hour. But if you were walking next to the car at 5 miles per hour, the car relative to you is going 25 miles per hour. That's how it usually works, but with light it's different. The speed of light is - I don't know the speed of light - but I'm going to say that it's 300 billion miles per second. If you are sitting still, relative to you the light is going 300 billion miles per second. But if your friend is going around at 50 miles per second (somehow), light relative to him is still going 300 billion miles per second.

But how can this happen? Something can't go two speeds at once. This is what makes it special. Instead of the speed of light changing relative to you, the time it takes for one second to past changes relative to you. Because of this the closer you are to the speed of light, the slower time moves for you. If you go at 300 billion miles per second, time just stops for you, and it's theorized that if you go faster you will go back in time.

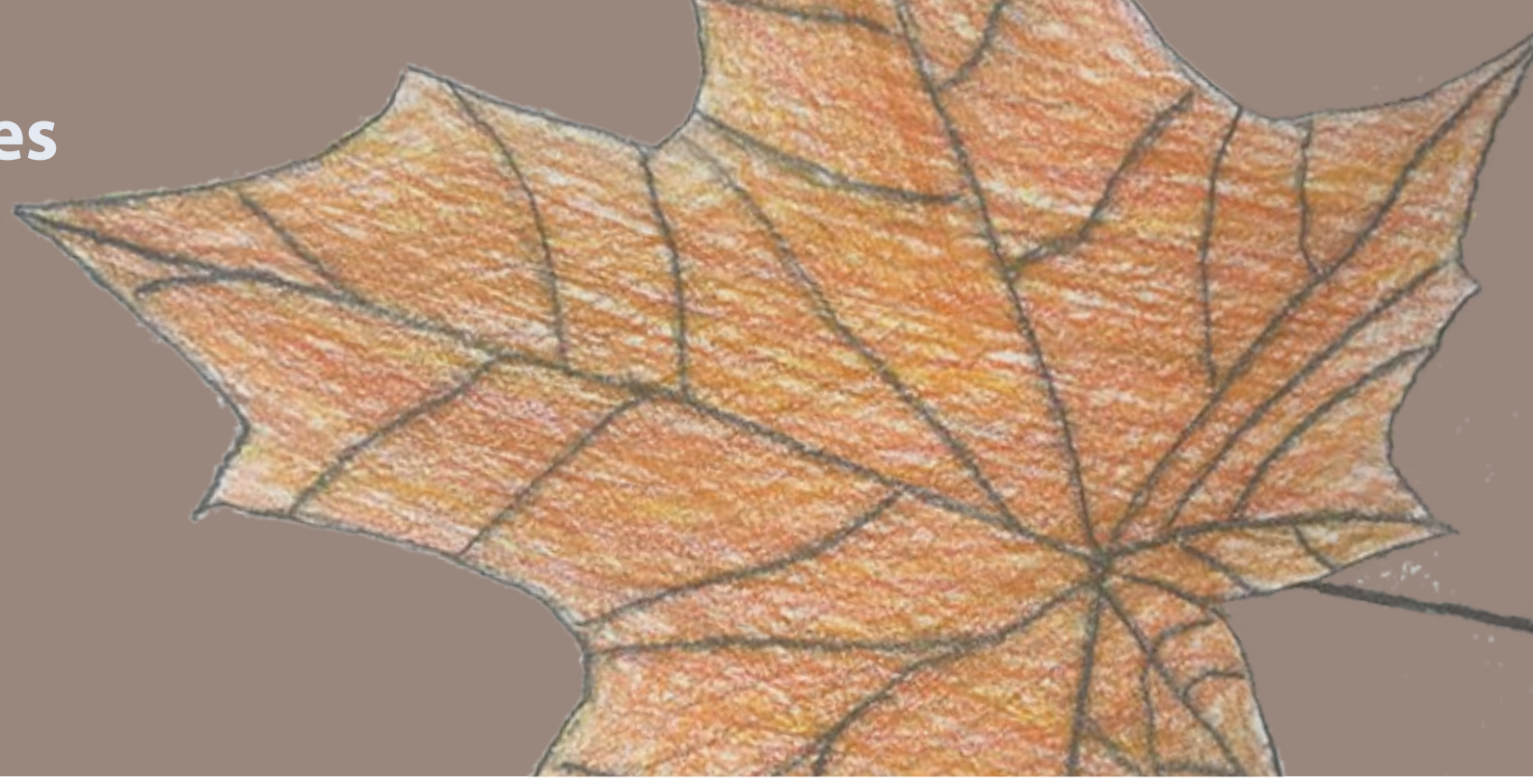
This is awesome but there's still a problem: if you go back in time you bring your particles with you. Those particles have mass. But those particles are also in the past, which also has mass. Mass can't be created though, so instead the mass that you took with you becomes a sort of "anti-mass".

This is really dangerous because if your "now" mass collides with your "past" mass they will cancel each other out, and you will be dead.

The farther back you go, the more spread out your current mass is, and the more likely it is for you to collide with yourself. This is why if I had to go back in time, I would go back one second and one second later I would be safe.

I learned all of this from a video on game theory about "Sonic CD". I don't know how to turn on the word count for this, so I hope I have at least 300. If I don't, then tell me and I will write more. The end.

Why Do the Leaves Change Color?



by Sidney

Why do leaves change color during the fall? In this article, you will be learning about why and how leaves change their color during fall. You will also learn about what happens after winter and how they grow back. You should know this if you don't want to fail kindergarten.

Leaves are green during spring and summer but red, yellow, orange during fall. Why? There are three colors leaves change into during the fall, red, orange, and yellow. Leaves become red, orange and yellow because of pigments. Pigments are chemicals that cause the change of color. The pigments are Xanthophylls (yellows), Carotenoids (oranges), and Anthocyanins (reds). Leaves are green during the summer, why is that? Leaves, in the summer are making chlorophyll, they make chlorophyll because it helps trees and plants get energy from the sun. The process is called photosynthesis.

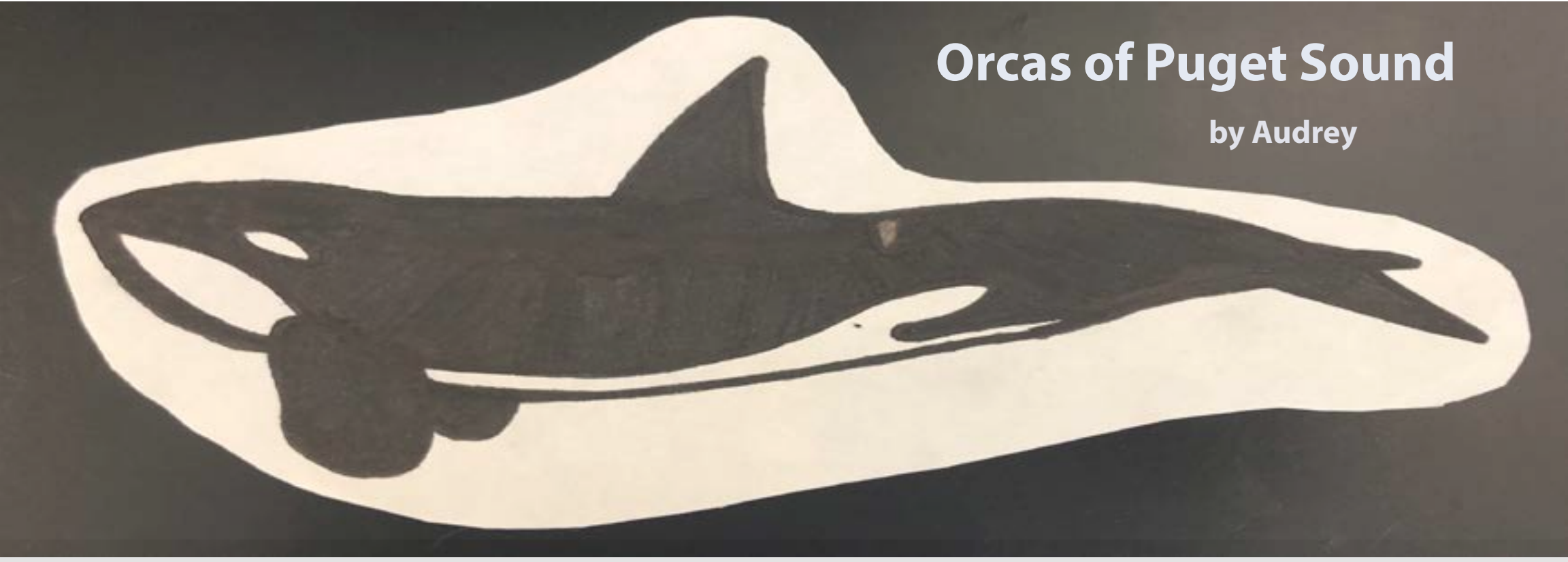
When summer becomes fall, the days become shorter giving less sunlight. This tells the trees and plants to get ready for winter and stop making chlorophyll. Once they stop the leaves will start to slowly change color. After the tree has completely changed color, all the leaves will start to fall off. That's when we have to spend hours outside raking.

Weather is important to trees when they are in the middle of the process of changing color. In the fall there's more rain and snow, which is very important to a tree. Changes in the weather affect how early the leaves will change color and how long they will keep color.

When a tree goes dormant it will prepare buds for the spring. Once it can tell it's warmer and there is more sun, its buds will burst out. The other trees will start to do it too. The little leaves will start to grow and the tree will start to make chlorophyll again. Like in winter, rain is very important. Why? Friendsoftrees.org says "The trees need the oxygen to cool its leaves, exchange oxygen and carbon dioxide, and move nutrients up the tree," and this happens every year.

CAT EYES by Ender F-R

Have you seen the glitter in a cat's eyes
The shine all atwitter in a cat's eyes
I could go on forever about a cat's eyes
Just recognize the beauty of a cat's eyes



Orcas of Puget Sound

by Audrey

Did you know orcas have a part of the brain humans don't? It makes their emotions more complex. In this article, I will be talking about orcas. I have seen them in the wild, and they are breathtaking. I will cover orcas in captivity, including an orca named Tokitae, and the resident orcas of Puget Sound in the wild.

Orcas are the largest dolphin in the world. There are three different types of orcas. Resident orcas are the squid and fish eaters, transient orcas eat mammals, and offshore orcas eat larger animals. Sometimes they even eat blue whales. The orcas in the wild I will be covering are the resident orcas of Puget Sound, which is a body of water in Washington state. They only eat salmon and some squid. Tokitae is in captivity, but she was once one of the wild resident orcas.

Orcas get depressed and do not live as long in captivity. We used to capture resident orcas in the United States, and some of them are still alive in captivity today. The orcas that were caught only ate salmon and squid, which is not fed to them at seaquariums. They feed them small fish that maybe a bottlenose dolphin would eat, not a 22 foot long orca. Today I will discuss an orca named Tokitae, or Lolita as they call her in captivity, and she lives alone in a small pool. It is like living in a 10 foot by 10 foot room for your whole life. Can you even imagine living in that small of a space alone your whole life? In the wild, orcas swim about 140 miles a day and can dive hundreds of feet deep (Animal Legal Defense Fund).

Orcas are very social creatures and live in family groups their whole lives in the wild. They are very emotionally bonded. Tokitae was taken from Puget Sound when she was a baby, and her mother is still alive in the wild. Ocean Sun is Tokitae's mother. She is 91 years old; Tokitae has been in captivity for 50 years. Researchers have done recordings of Tokitae and Ocean Sun echolocating, and then they play their voices for each separate orca. They remember each other's echolocation. They respond to each other. Maybe this is why Tokitae has stayed alive so long in captivity. Tokitae knows her mother is still alive in the wild. What would it feel like if you were taken away from your mother? How would your mother feel? That is what hundreds of orcas have gone through because of humans.

Orcas in the wild stay with their families for their entire lives. To give an example of how important family is to an orca, last year an orca's baby was born dead in the Puget Sound and the mother orca carried it around for weeks. Eventually, researchers took the baby orca away from her to study. The baby was born dead because of all the trash in the ocean. In Puget Sound there are three pods: K pod, L pod, and J pod. Many of the orcas that I saw when I was

there three years ago are now dead. So many have died that the resident orcas in Puget Sound are now endangered. They were listed under the Endangered Species Act in 2005 with a decline of 10% a year. The population started at around 140, and at the end of 2019 there were only 73 Southern Resident Orcas left (NOAA Fisheries). The trash in the ocean is one of the reasons they are dying. The second reason is because there is a dam that keeps the salmon trapped and the orcas can't get to it. If they took down the dam, more of the orcas could get the salmon they need to eat and more wild orcas in Puget Sound would have a chance to survive.

I'm happy to share that we no longer capture orcas in the United States. However, China is just starting to open hundreds of seaquariums where many orcas are being held in captivity. Everybody can make a difference to help these orcas. One way to help is to not buy tickets to seaquariums with orcas. If you want to learn more about orcas and how they are treated in captivity, watch "BlackFish" and "Long Gone Wild". I hope that one day the wild orcas will be protected and the captive orcas all over the world will be wild and free.

Works Cited

Author unknown. (n.d.). In the Spotlight Southern Resident Killer Whale. NOAA Fisheries. Retrieved November 2020, from https://www.fisheries.noaa.gov/species/killer-whale#spotlight

Author unknown. (2020, March 23). Protecting Captive Orcas. Animal Legal Defense Fund. Retrieved November 2020, from https://aldf.org/project/florida-orca-protection-act/