

The Adventures of Pinny the Pinniped

By Eleanor Ransdell-Green & Jeremy Sanchez

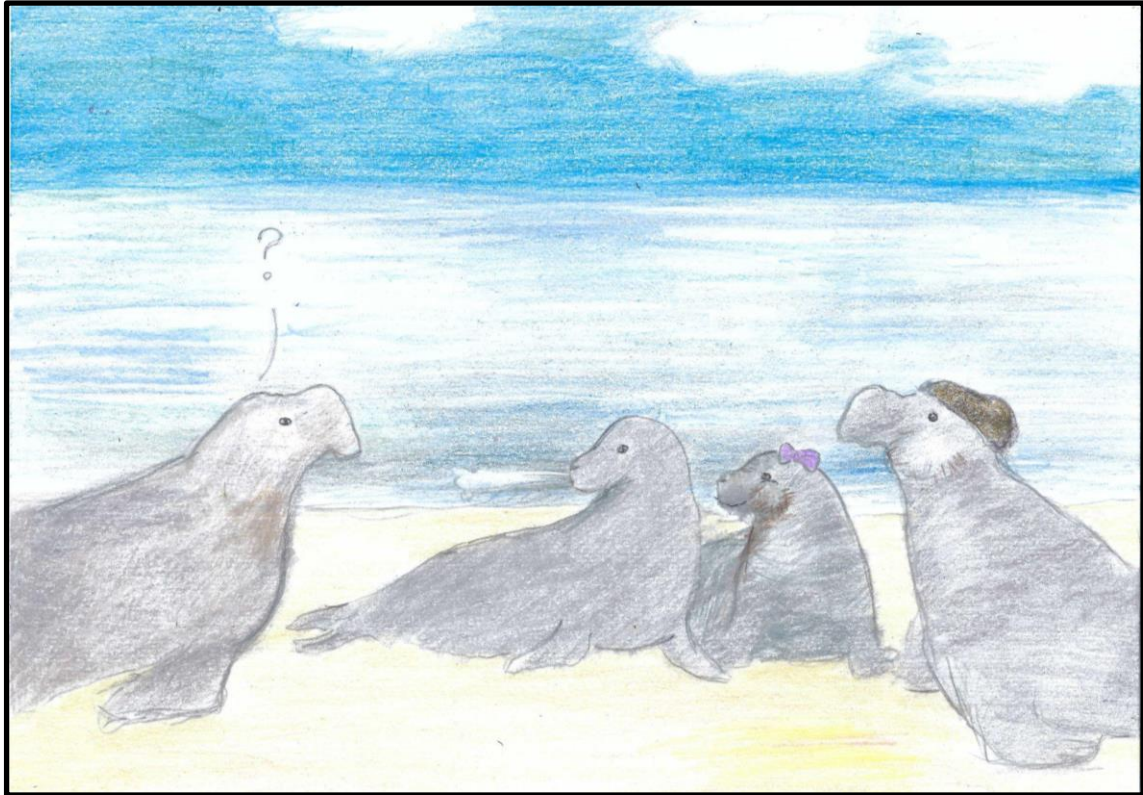
Pinny the Pinniped is a juvenile elephant seal sunbathing on the sandy beaches of California. It's a nice warm, sunny day, but Pinny isn't feeling happy, he is feeling all alone.



Just yesterday, Pinny's mother left him! After nursing him for one month, Pinny was big enough to survive on his own. He had gained 230lbs since he was born and now, he is a whopping 300lbs! But Pinny didn't feel able to survive on his own. He did not understand why his mother left him. Pinny had asked her, "Mother, how will I find food?" but she simply said, "You must dive deep into the ocean, down to 400 feet. There you will find yummy fish and squid to feast upon. You'll be fine." He looked at her in disbelief as she waddled out into the surf. "Good luck my son, I will think of you, and I hope to see you next year!" she called to him cheerfully as she dove beneath the waves.

How could she leave him? Tears welled up in Pinny's eyes. He felt so alone on the empty beach. Now the ocean seemed big and scary. How in the world would he find food?

As Pinny cried, he heard voices through the sound of the wind and the waves. Pinny waddled toward the noise to investigate, and found other elephant seals his age. The three were sitting in a circle, holding their breath.



Pinny's spirits were lifted as he came near and introduced himself "Hi, my name is Pinny!" They greeted him warmly and told him their names. The biggest in the group said "My name is Horton, the smallest one is Emily, and this is Sally"

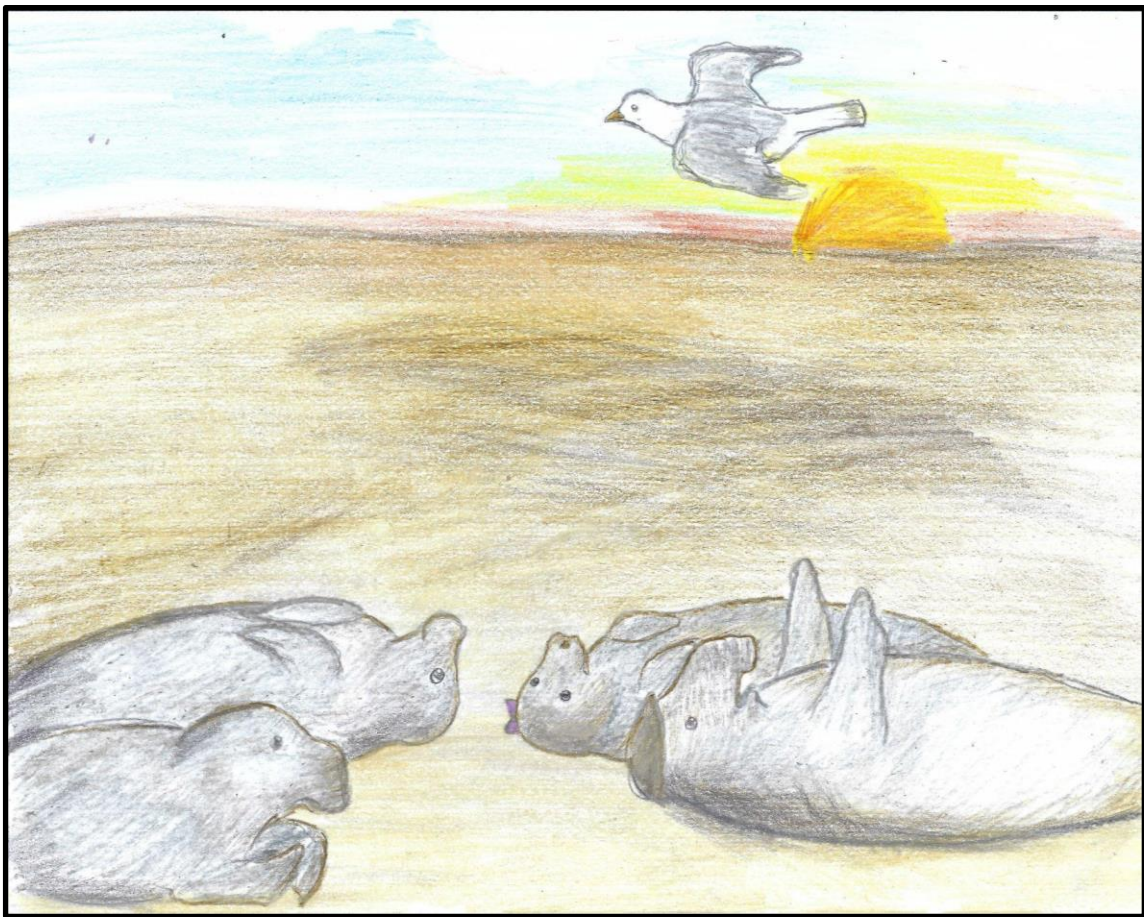
"What are you all doing?" Pinny asked. "We are practicing holding our breath so we can dive deep in the ocean to forage for food."

"Why don't you practice with us?" Sally said, excitedly. Pinny was sure he couldn't hold his breath for long enough to find food, but this game didn't sound so bad. He decided that this was his best shot at learning how to dive, so he agreed to join the group.

Emily said to Pinny, "We are planning on doing our first dive tomorrow so today we are practicing our breath-holding on the beach." Pinny asked, "How long are you supposed to hold your breath?"

Sally said, "As long as we can, which happens to be 5 minutes right now." Pinny was amazed at how long they are able to hold their breath. Horton chimed in, "Well, it's getting late, should we continue practicing our breath-hold?" The group agrees and they start practicing.

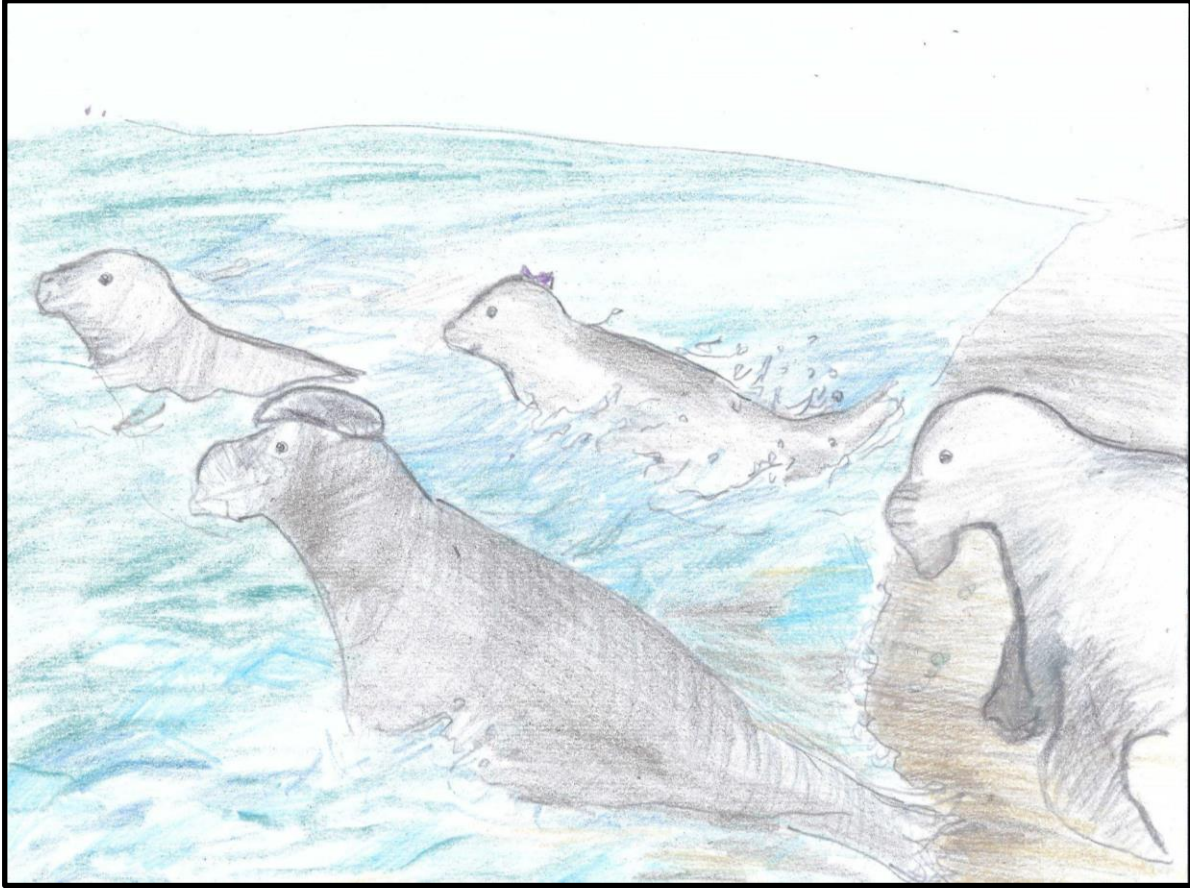
Pinny and his new friends suck in big gulps of air and hold their breaths, seeing who can hold their breath the longest. This produces a lot of giggles, and they all roll on the beach in laughter. As the sun sets, they settle themselves on the sand to go to sleep. Emily asks Pinny, "Where are you going to migrate?" Pinny looked confused and replied, "I don't even know what that means." He tried to remember if his mother had ever mentioned that word.



Horton seemed to know all about it , "A migration is where we travel long distances. We do this to find places with better food." Pinny asked, "How far do we travel?" Horton told him, "Well, the seagulls have told me that they have seen our species travel all the way to the Aleutian Islands of Alaska!"

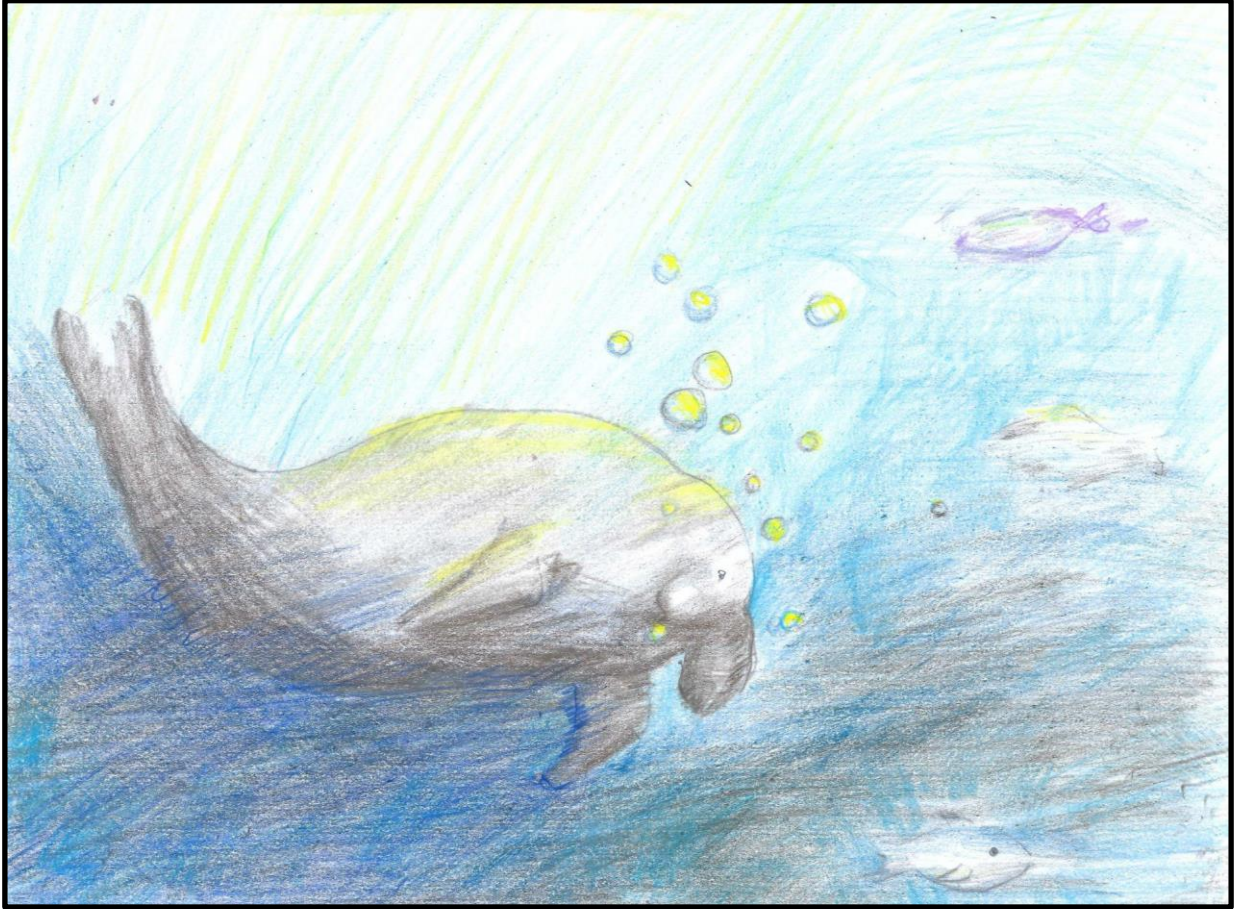


Talk of such a long trip through unknown waters was too much for Pinny to think about right now. He was just so tired and had been through enough today. He heard snoring and in no time, he was asleep himself.



Pinny and his friends woke up the next morning to another sunny day. Somehow things seemed a little less scary today. The group clambered into the waves! Pinny enters the water and it's cold at first, but as his whole body is submerged in water, he feels warm again. He swims towards his friends who are floating nearby.

As Pinny approaches the group Sally says, "On the count of three we will all dive together!" Pinny is nervous, but he knows he has to do it. Sally counts to three and they all take a breath and disappear into the waves.



It is a challenge for Pinny to dive down, he feels like his body wants to float back to the surface. He was able to power through to keep diving down. Pinny could not see well underneath the water which caused him to panic and his heart to beat faster. He was running out of breath, so he returned to the surface.



Once Pinny had reached the surface he gasped for air. His friends were still underwater so he took the biggest breath he could and dove again. But again, he ran out of air, and fear filled him as he rushed back to the surface for air. He was frustrated and angry with himself. Why couldn't he do it? His friends didn't seem to be having this trouble. He knew he needed to dive not only for the migration, but also to get food. And Pinny was getting hungry!

Finally, his friends resurfaced. Pinny caught sight of a squid hanging out of Emily's mouth just before she slurped it down. All his friends were excited about their new experience in the ocean waters.



Pinny was tired and discouraged. He headed for the shore, disappointed that he wasn't able to stay under the water for as long as his friends did. They called his name several times, urging him to come back but soon they all plunged under the surface again.

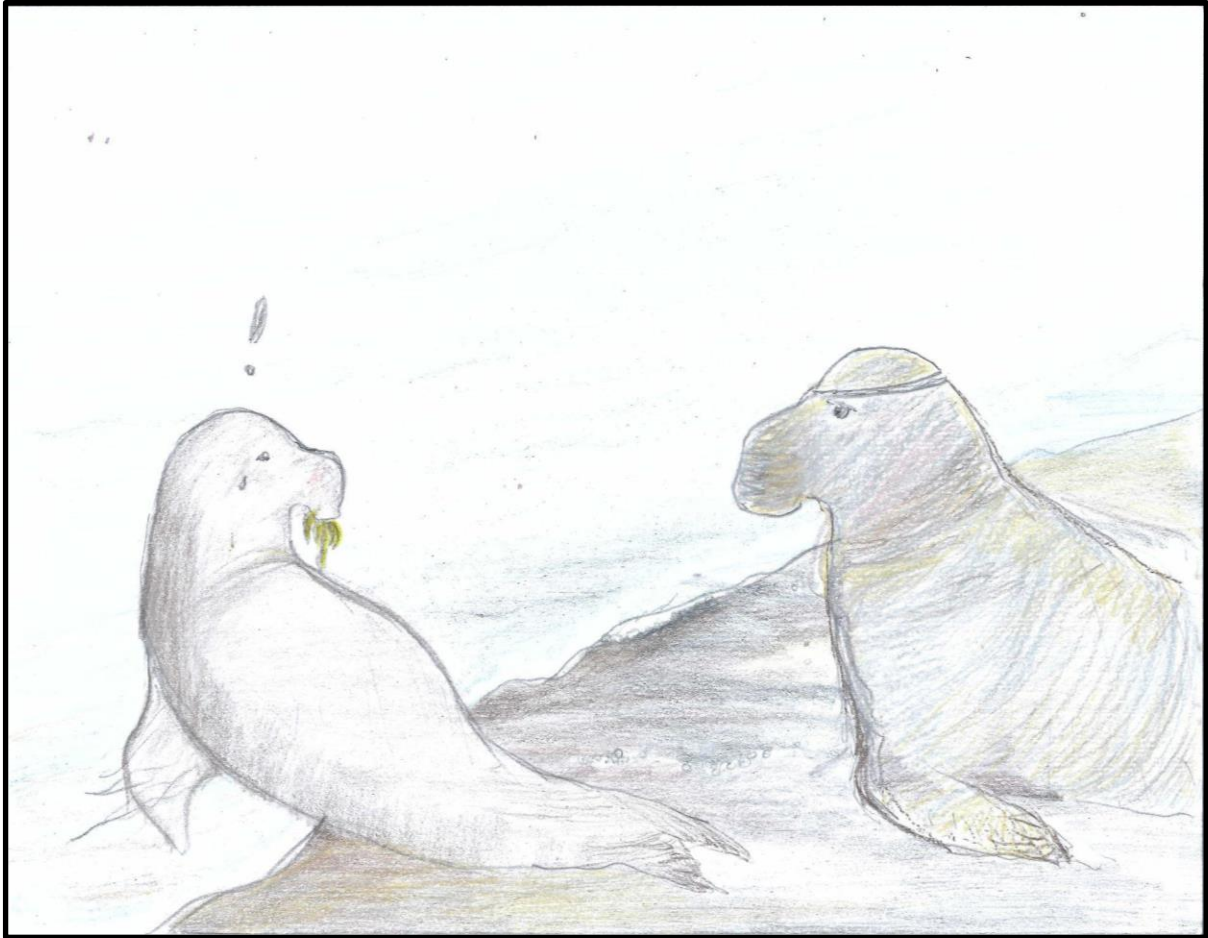
Back on shore, Pinny realized how hungry he was. He searched the beach for something, anything, to eat. He came across some seaweed and started to eat it. It tasted awful, but he had no other options.

“What’s that you’re eating there, young fella?” a raspy voice behind Pinny exclaimed. When Pinny looked up, he saw an old elephant seal with an eye patch. He had a huge scar on his side that looked like it might be a shark bite.



“Seaweed.” said Pinny, sheepishly. “Haruph” said the old timer. “Why would you be eating that when there are much better tasting things in the ocean?”. Now the tears came out as Pinny sobbed “Because I can’t dive!”

The old timer said “Well, calm down, calm down! Why can’t you dive?”



“I have to work so hard to swim down,” Pinny cried, “and then I start to panic because I can hardly see under the water.” The old timer’s voice was gentler now. “Well listen here, Youngster, that’s not your fault. You have a lot of blubber on your body right now, that’s why you float to the surface. Don’t worry about it too much. As you get older and bigger, you’ll have less blubber and it’ll be easier for you to dive.”

“And the reason you can’t see anything below the surface is because you haven’t given your eyes enough time to readjust to the low light in the ocean waters. It takes only a few moments and then you’ll be able to see alright. The secret is to just stay calm when you dive.”

Pinny listened intently to this new information. “Why must I be relaxed?” “In the air, there is oxygen, the old timer explained. “Oxygen is a molecule that our body needs to make lots of energy, through a process known as **aerobic metabolism**. Aerobic means that it involves oxygen. In this process, our body requires oxygen to efficiently convert proteins, fats, and carbohydrates

that we get from our food into energy that we need to survive! Luckily, we elephant seals are able to maintain aerobic metabolism even when we are diving. That is a much more efficient way to generate energy than through anaerobic metabolism, a process that does not require oxygen.”

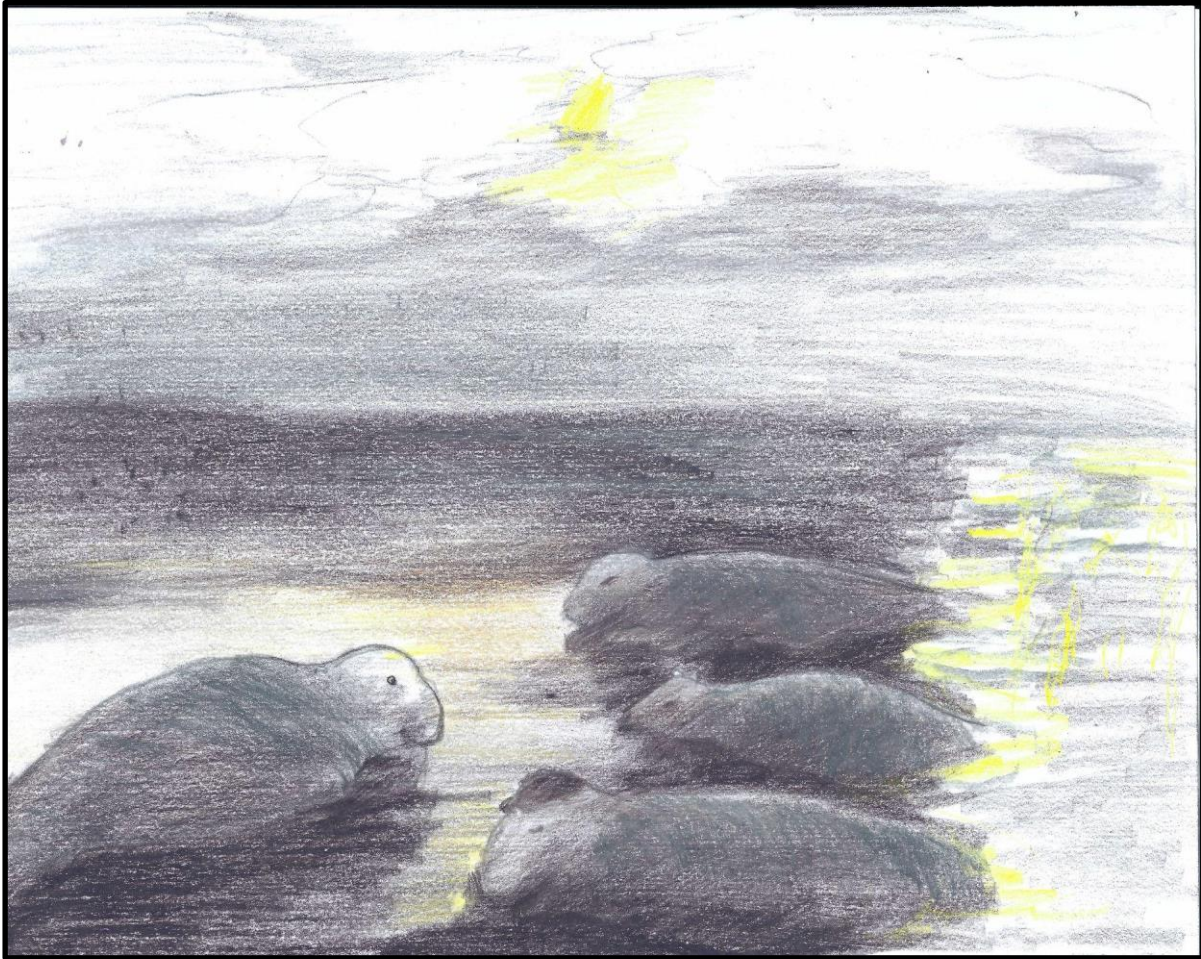
“We elephant seals have the ability to store a lot of oxygen within our body when we take those deep breaths before we dive. When we dive, it’s important that we do not use up all our oxygen too fast before we resurface. To reduce the amount of oxygen we use during our dive, we need to reduce our heart rate to slow down oxygen transport through our blood to our tissues! If you are panicking underwater, your heart is going to beat faster than normal. This will cause your body to use all of the oxygen that is stored in your blood. If you do that you won’t be able to stay under long enough to find any food.” Pinny looked at him with concern.

“How do I lower my heart rate?” asked Pinny worriedly.

“You relax, Pinny, and think happy thoughts. You need your heart to beat slower than usual. This will allow you to slow down the use of the oxygen within your body, and that will help you dive underwater for longer times.” Pinny felt overwhelmed by the knowledge that the old timer had just told him and was worried that he did not have the ability to slow down his heart rate. The old timer poked him teasingly with his snout and told him, “Why, you are going to do just fine, young fella. Don’t you fret! We elephant seals spend the majority of our time underwater so you must not be afraid of it.” said the old timer.

“Well, I should be off, the sun is starting to set and I want to get to my good sleeping spot before other seals try to take it. Just get back out there and try again, you’ll get it”, said the old timer, and he waddled off down the beach.

As the old timer disappeared into the distance, Pinny’s friends came to shore looking very tuckered out from swimming all day.



As soon as they reached Pinny they all collapsed and started snoring. Pinny laid down and mentally prepared himself for tomorrow's dive. Stay calm so your heart beats slower. Don't panic, it's going to be fine.... just think happy thoughts. Moments later he fell asleep.

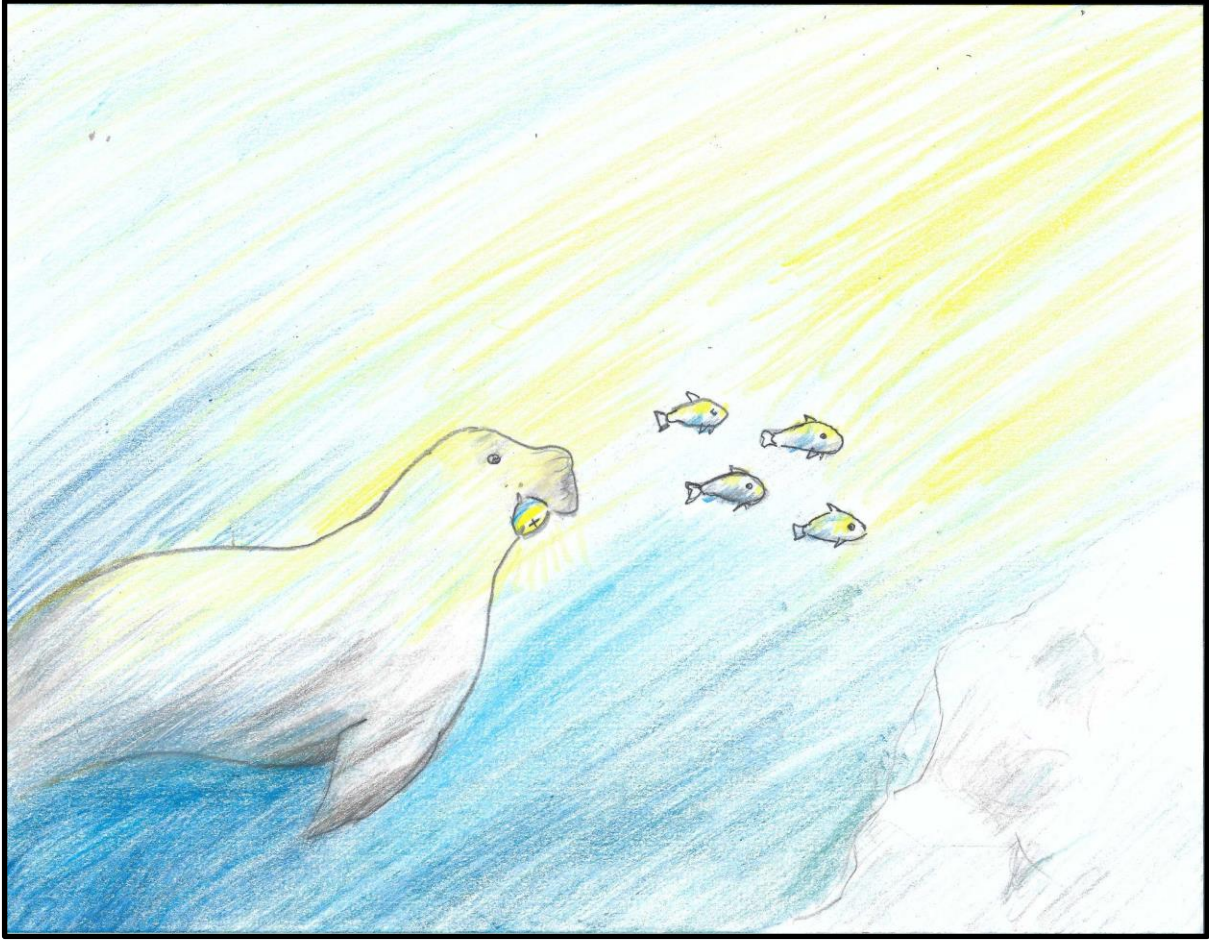
Pinny had woken up as the sun started to rise. It was a beautiful morning and there was a warm breeze on the beach. Pinny wanted to face his fears and go dive, but his friends were still asleep. He thought about waking them up but decided not to. He waddled into the ocean and started to swim away from shore into deeper waters.

He found a spot where he would start his dive and began to take deep breaths to fill up his oxygen stores. Pinny said to himself, "Stay calm, and think happy thoughts. I can do this." He took a deep breath and with strong movements of his tail and body, he swam down, and down. As he dove, he imagined his heart beating slowly, and pictured using just a little oxygen at a time. 'Ok, ok, *this is working!*' he thought to himself.

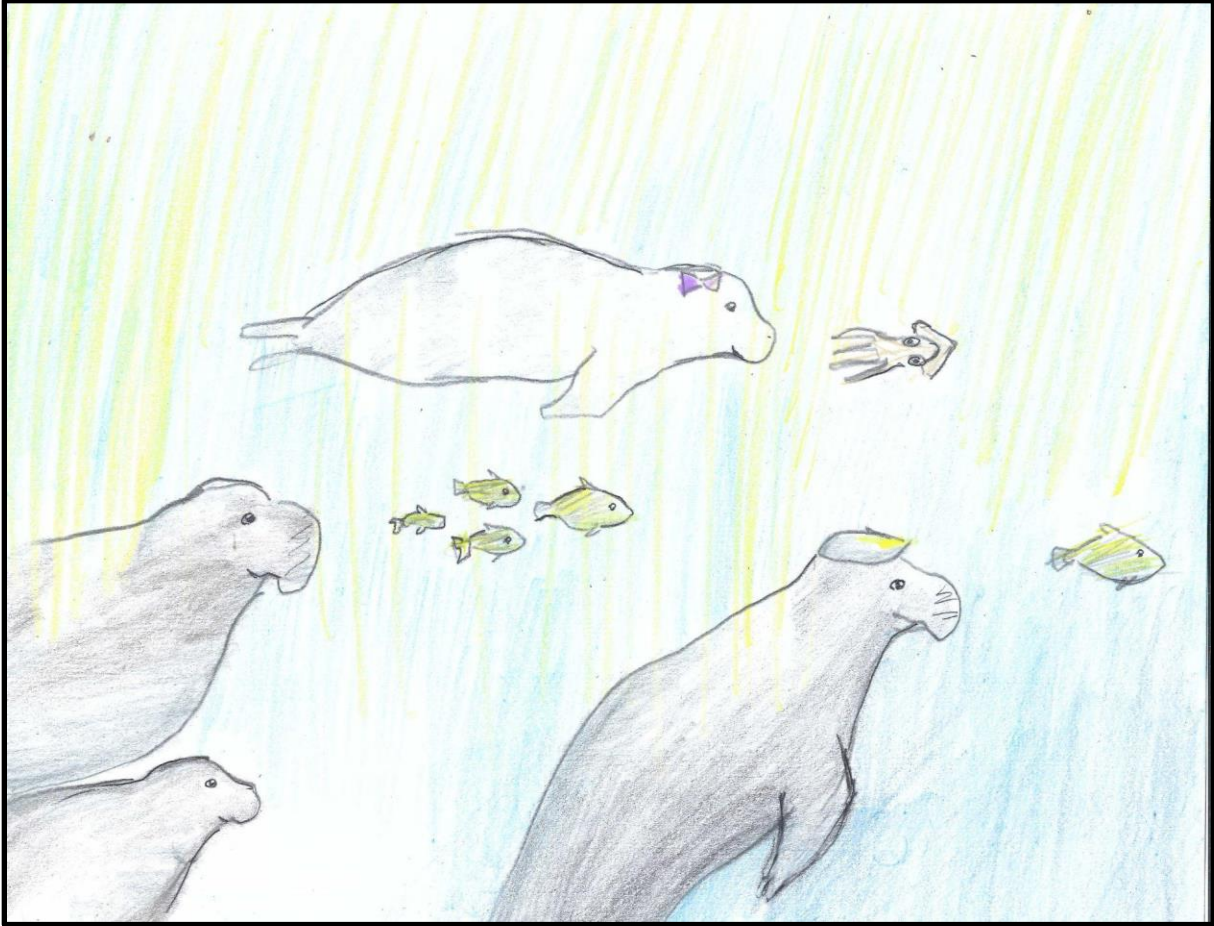
It was dark at first underwater, but he did not panic this time. He felt relaxed and moments later his eyes adjusted, and he saw a whole new world in the ocean waters. There were swimming everywhere and weird looking plants on the ocean floor! Pinny was amazed by what he was seeing.



He was able to swim very fast without his heart beating fast at all. Pinny's stomach started growling so he decided to go forage for some food. He found a school of fish that was small enough for him to catch. He swam very fast and managed to get one. He gulped it down very fast and found that the fish was very tasty.



He started to feel a little woozy, so he figured that it was time to surface and get more oxygen. Pinny swam to the surface and gasped for a big breath of fresh air. Pinny felt very proud that he had been able to dive and find food. He only stayed at the surface for a few minutes and then he dove again.



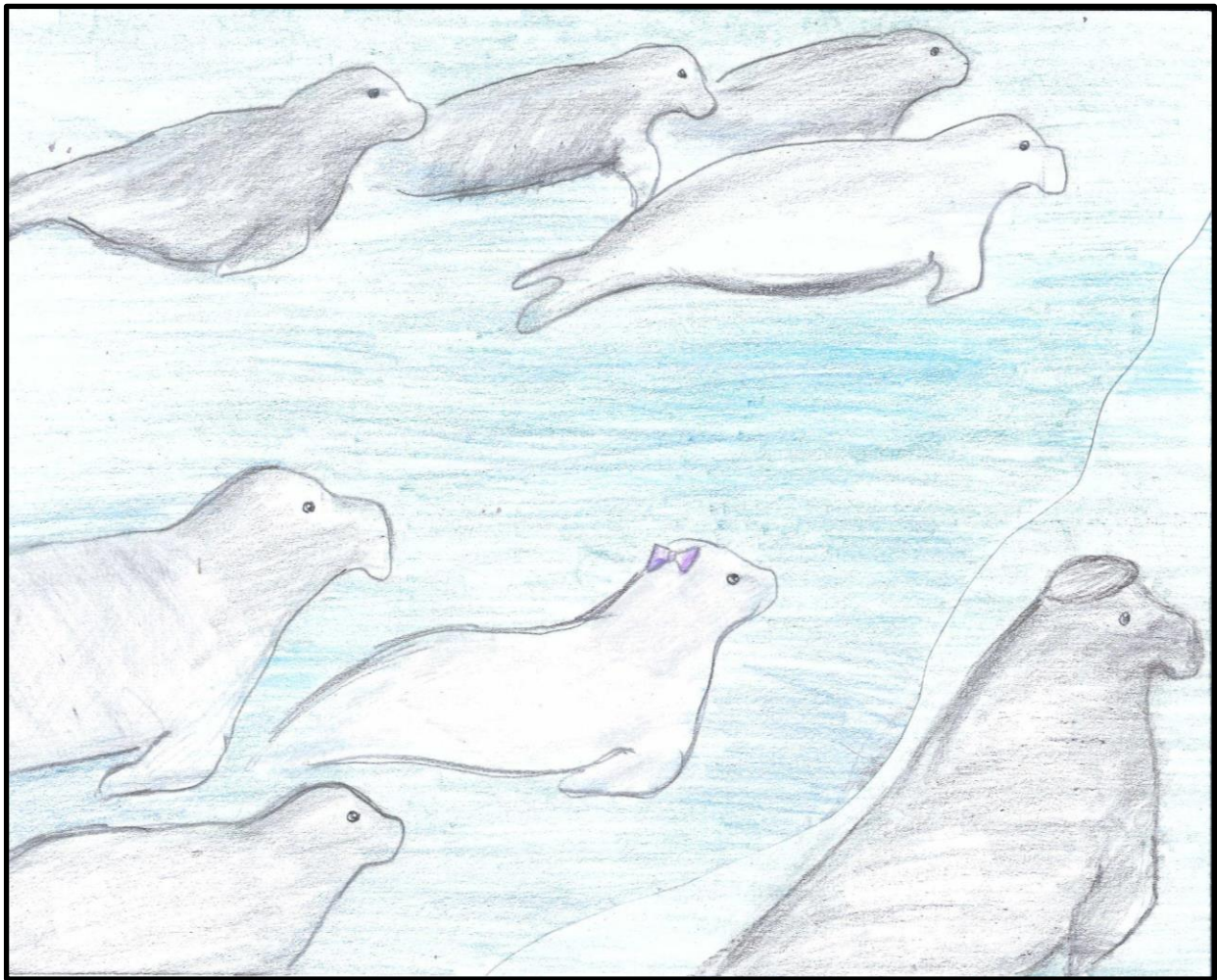
As he was diving down, he saw Emily chasing a squid and Horton chasing a lone fish. Sally swam next to him and pointed to a school of fish. They swam after it and they each managed to get a fish.

As the day went on, the sun started to set, and the group came back to shore with full bellies. As soon as they got to their resting spot, they all collapsed from exhaustion. Pinny was full of joy because he had faced his fears and was confident in himself. He knew that he would be able to survive during the migration. As the sun disappeared on the horizon, Pinny fell asleep.

A few months have passed and now Pinny is an excellent diver. He is able to stay underwater even longer than his friends! He has also figured out how to maximize his oxygen consumption at the water's surface to minimize how much time he spends floating around.

On day while swimming underwater, Pinny sees a large group of elephant seals swim right past him, heading north! He quickly finds his friends and signals for them to meet at the surface.

Once they got to the surface, Pinny explained what he just saw. Horton said "The migration must be starting! If we see another big group, we should join them." The rest of the group agreed and a few hours later they saw another group of Elephant seals swim by, and they rushed to catch up with them!

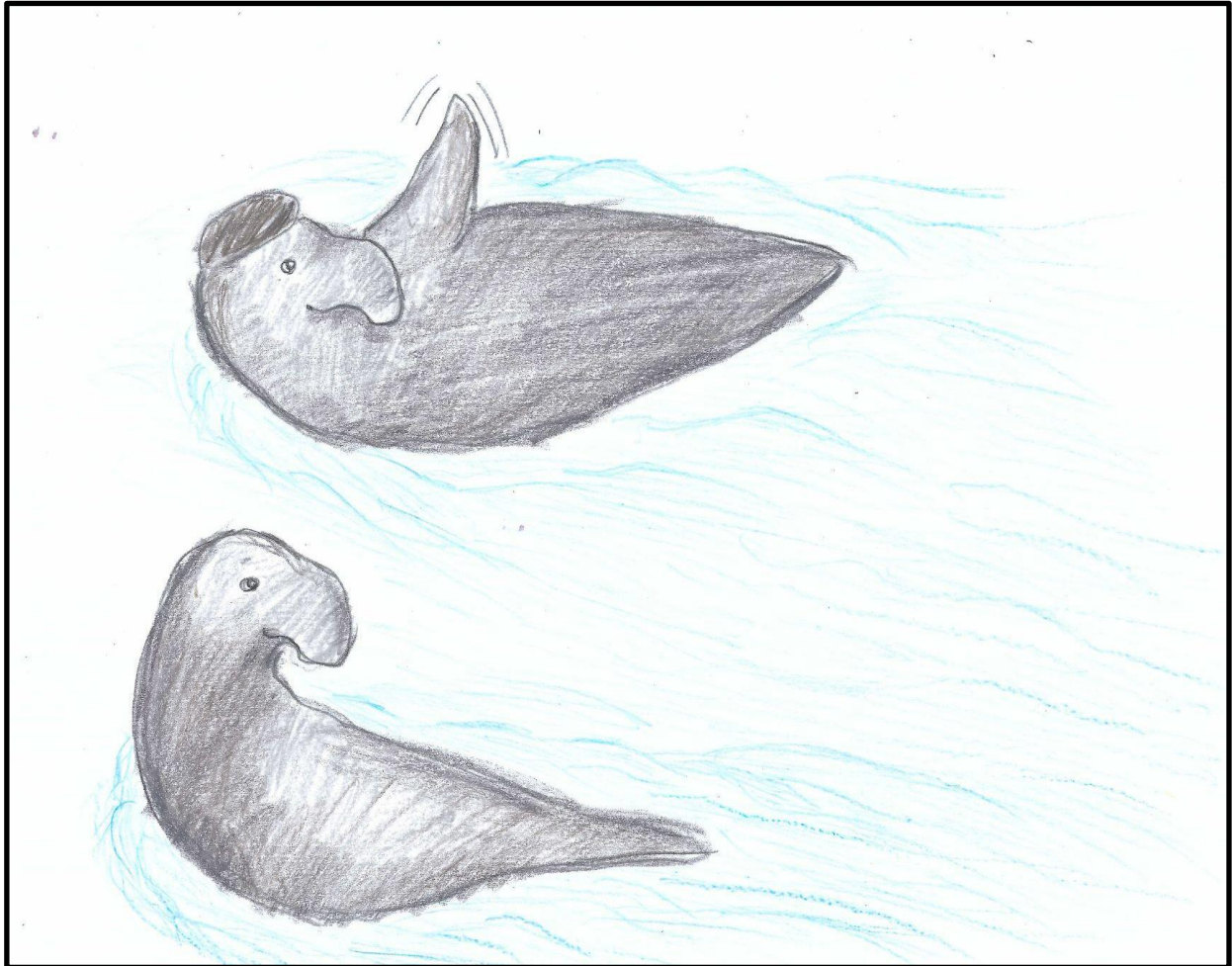


Pinny and his friends swam with the group for a few days but once they reached a place called Washington, they took a break from the migration. Emily and Sally are amazed by the area because all of their favorite foods are there. When they talk to a group of other female elephant seals, they decided that the two of them will stay in Washington for the rest of the year, until time to migrate back to California.

Pinny and Horton on the other hand did not like the food that was available in Washington so they both agreed to keep migrating to Alaska in hopes of finding better food that they liked. They told Emily and Sally of their plans but agreed that they would stay one more night together as a group before they take off again.

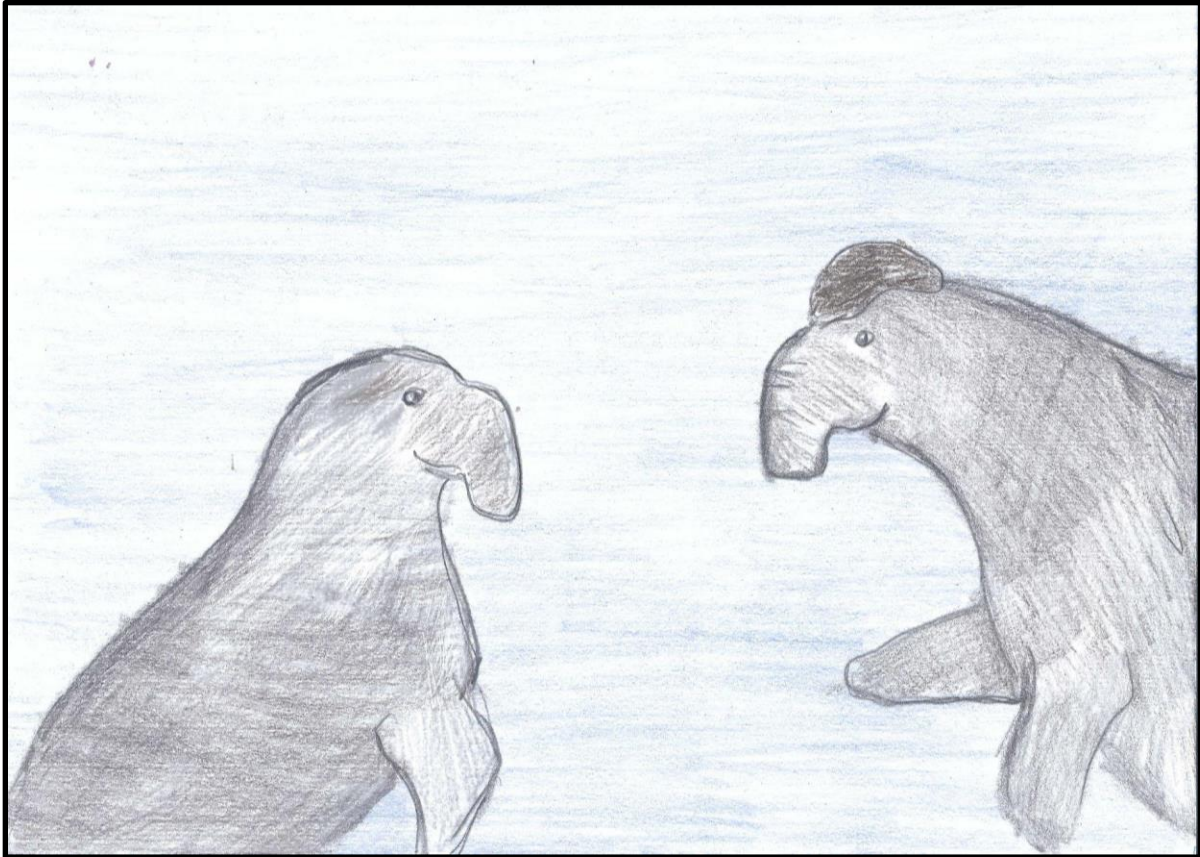
That night as they were on the beach getting ready to go to sleep the group started to chat and recollect all of their fond memories of learning how to dive together. Sally started to cry and said, "I'm going to miss you guys!" Pinny replied, "Don't worry we will meet back up in California again! We will swim and forage in the same spots that we did when we were younger." That brought Sally to ease knowing that they will see each other again in the future. The group continued to chat and soon they fell asleep.

The next morning Pinny and Horton woke up early so they could have an early start to the day. They said their goodbyes to Emily and Sally then swam off into the ocean.



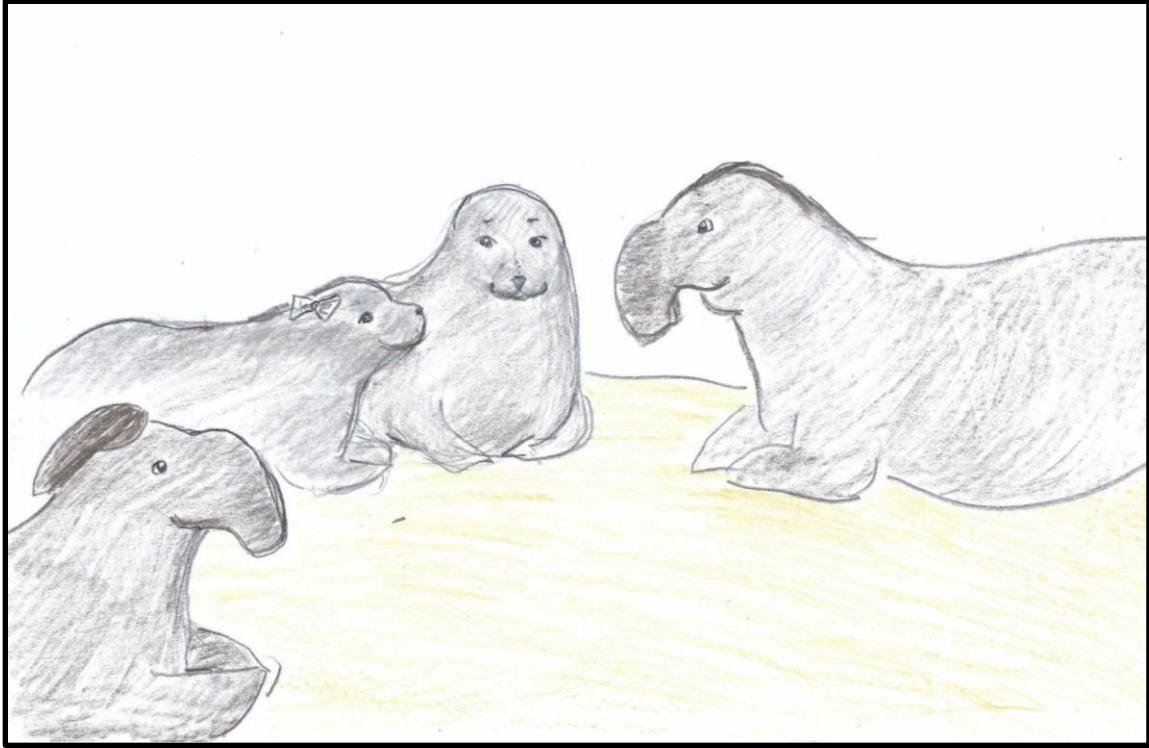
A few days later, Pinny and Horton finally made it to the Aleutian Islands of Alaska. They were excited when they got there because they saw a lot of their favorite foods in that area.

Eight months roll by and now Pinny has grown a lot in body size and has started to develop his proboscis. Pinny excelled at diving and has been able to dive underwater for an hour going down to six thousand feet. Pinny senses the change in daylight which alerts him that it's time to go back to California to sunbathe for a few months. He finds Horton, who has also grown, and tells him of his feelings about this.



Horton agrees that it's time to head back to California and they begin making their way back to where they were born. After a few days travel, they make it to Washington and take a break to find Sally and Emily. They search and search but can't find them anywhere! Pinny and Horton sad that they can't find their friends but eventually have to stop to forage for food. All of a sudden, Emily and Sally crash into them!

Back at the surface, they joyfully shared their experiences from the past eight months, but soon it was time to head back to California. Pinny is glad that his group of friends is all together again and returning to the place where their journey began.



The End

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