

## Ms. Baas's grade 1/2 class



### **October 4**

As a preparation for learning about biotic and abiotic aspects of the world, students hiked down Schooner Cove and used their 5 senses to postulate whether the things they found along the way were alive or not alive. Students learned about mushroom growth and berry diversity, as well as some of the key features of living organisms.



### **November 21**

After learning different techniques animals apply to survive over the winter – by migrating, hibernating or adapting - students headed into Pacific Rim National Park Reserve to learn more about the research and monitoring efforts in our region. Students learned about research and monitoring for: hibernating black bears, migrating shorebirds, and roosting bats. And of course, students got to learn from a local biologist who is in charge of all this research! A big thank you to Sarah Tyne from PRNPR for sharing your knowledge with our budding scientists.



### **December 5**

Students headed down to Tonquin Beach for an icy morning! Students learned about ice formation, and the state of matter, including liquid and solids.



### **February 7**

In preparation for their mapping unit, students headed into Tofino to learn all about map making and cardinal directions! Students made their own map of Tofino while learning how to navigate around town, and discussed the wants and needs of our community.

## Ms. Howard's K-3 class



### **November 6**

As a preparation for learning about intertidal organisms, students learned how to be scientists, made predictions and observations of the high tide and then began to explore the different creatures that inhabit the intertidal zone.



### **November 13**

After learning about how tides change, students learned about some of the critters that inhabit the intertidal zone! After studying crabs, limpets, and other species in the mudflats, students made a food web to illustrate how the species interact with one another, and then discussed different adaptations that animals have to cope with the challenges they face in their muddy habitat.



### **November 20**

Students learned about the key features of living and non-living things and then used their five senses to discover some forest dwellers! Afterward, students began a berry-picking extravaganza in preparation for next week's berry baking day!



### **November 27**

After picking loads of evergreen huckleberries, students headed to the kitchen for a baking extravaganza! Working as a team, students measured out the ingredients to make a delicious batch of huckleberry pancakes! Nice work everyone!

## Ms. Howard's 4-7 class



### **October 30**

Students spent the morning getting ready for their research project about the moon and tides! After learning about the scientific method, the lunar cycle and gravity, students wrote a hypothesis to predict the effects of the lunar cycle on the degree of tidal variation, and then headed out to the beach to choose their study site for the upcoming month of tidal observations!



### **November 6**

After choosing 3 study sites last week, students headed back to these locations to do their first round of written observations during high tide on the new moon! Students reviewed key stages of the lunar cycle and then made predictions on what the tide will look like during the first quarter.



### **November 13**

Part 3 of their moon and tide project was a wet one! Students headed into sideways rain to make observations about the height of the tide during the first quarter – today's stage of the lunar cycle. Afterward students learned about how the Moon, Earth and Sun are connected to each other, and how they affect Earth's tides.



### **November 20**

After doing their weekly tidal observations, students started to compile their data and extrapolate preliminary results about the correlation between the tidal variation and lunar. Students learned about how to make a graph, and then used live tide data to plot out the highest high tides and lowest low tides for each day of the month. So far students noticed that the extremes of the tide heights fall near the same time as the new moon and the full moon – neat!

## Ms. Morris's grade 6/7



### **September 14**

Grade 6/7 students have officially begun their Marine Diversity Inventory project! Students headed to the Tofino Mudflats Wildlife Management Area, the most important wetland complex on the west coast of Vancouver Island. Their goal was to create a species inventory of this unique ecosystem to learn about the diversity that the WMA supports. Students found many species of birds, fish, invertebrates and algae – a total of 34 different species! We know there are more species out there, but this has been a fine start to their exploration of marine diversity on the coast. Next up will be exploring the kelp forest ecosystem!



### **September 27**

As a continuation of their Marine Diversity Inventory project, students headed to the kelp forest and examined this unique ecosystem from paddleboards! Students learned about kelp forest dynamics on the beach, snorkeled in the kelp forest in search for as many species as possible, and then tried their luck and kelp knowledge in a round of kelp trivia! Students collectively found over 30 species; including many rockfish species, several crab species and moonsnails!



### **October 12**

Students headed to Frank Island to explore interactions between intertidal organisms! After learning about safety and beach etiquette students observed and recorded the interactions between various organisms, and even found urchins, sea lemons and sponges!



### **November 2**

After learning about various marine ecosystems, students headed to the Ucluelet Aquarium to learn about the subtidal environment! Students chose a tank to draw and then used the resources at the aquarium to do a mini project about a fish or an invertebrate, and the species' challenging and adaptations. Afterward students shared their new knowledge with classmates! What a fun and learning-filled day!

## Ms. Hovi's grade 6/7 class



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## Mr. Grigg's grade 5 class



### **October 11**

After learning about human body systems - particularly the digestive system – students headed to the beach to learn about invertebrate digestion! Students observed and hypothesized how crab, mussel and anemone digestion works, then learned about their systems and finished off by correlating the invertebrate systems to the human body's digestive system!



### **November 15**

After learning about the circulatory system of the human body in class, students headed to Tonquin beach to examine the circulatory systems of different intertidal invertebrates – such as crabs, mussels and sea anemones. Afterward students learned about phyla and animal classification, including some key features of the phyla in which their study organisms are in, and wrapped up by learning and teaching each other how the circulatory systems of these animals work; including comparing and contrasting their systems' to the human body's.



### **December 4**

Inspired by the frigid temperatures that delivered a layer of frozen ocean this morning, students learned about sea ice formation and about the freezing temperature of solutions (i.e. sea water) compared with freshwater. Students also learned about varying densities of salt and fresh water, and of cold and warm water, and that these changes in water density and salinity are responsible for the global marine conveyor belt that distributes oxygen throughout our oceans!



### **February 11**

Students headed out to Tonquin Beach to continue their invertebrate inquiry study! Students observed and drew a familiar animal, then asked questions about the animal's behavior, lifestyle, feeding habits and many other more inquiries!

## Mr. Reynold's grade 3/4 class



### **October 3**

Students have been learning all about the formation of the Earth and geological processes. Students headed to South Florencia to learn about formation of common igneous rocks on our coast, as well as the different terranes that have formed Vancouver Island. Afterward students mapped out a geological timescale across the beach to represent key geological processes (ie volcanism, glaciation, erosion) that shaped Vancouver Island as we know it today!



### **November 14**

After learning about geology and coastal erosion in class, students learned about the Tofino Mudflats Wildlife Management Area – its importance for the ecosystem and how it's managed, as well as how it was formed and some key species that inhabit the mudflats. Students also discussed the importance of eelgrass as a bioindicator, how to look for signs of eutrophication, and examined the condition of the eelgrass in our environment.



### **January 14**

After learning about endangered species and wildlife conservation, students got to learn about a local endangered animal – the Northern Abalone. Students learned about some of the threats abalone face, including changing habitat and poaching. Students also collected plankton to learn about this species' life history and played a game of abalone-kelp-plankton tag to learn about how this species food sources change throughout its lifetime. Afterward students discussed the value of species conservation and came up with solutions to declining populations of this gastropod.

## Ms. Michaud's grade 3/4 class



### **October 23**

As an introduction to learning about interconnectedness, students learned all about the wonderful world of fungus! The class headed out to pick a few unique species while learning about fungi's role in the rainforest, including how species in this kingdom connect plants in the forest. Then students learned a few secrets to identifying mushrooms and made spore prints of select specimens.



### **November 15**

With a focus on habitat, students headed to the forest to examine mushrooms! Students observed the key elements of successful mushroom habitat while keeping an eye out for mushroom diversity in the forest. Afterward students discussed the key things that mushrooms need to survive, and learned that the biggest organism in the world is actually a mushroom! Cool!



### **November 29**

Students have been learning all about mushrooms, and today they headed out to observe and draw a mushroom in its habitat, and practice mushroom ID skills! Students learned about the mushroom lifecycle and some of its reproductive adaptations, and then learned about other common, cool fungi, such as yeasts, moulds and even discovered the wonderful world of lichen!



### **April 5**

Did you know that bacteria live in just about every environment on Earth? Including the ocean, the forest, inside our bodies, in hydrothermal vents and even inside sea ice! Students are learning all about these microscopic critters; their importance in our life, and in the surrounding ecosystem. Can you spot the 5 little 'bacteria' running around the forest trying to survive? (Hint: some are red and some are yellow)

## Ms. Aujla's grade 4/5 class



### **September 20**

Students hiked down to Middle Beach as a team-building day and to introduce the coastal temperate rainforest as their learning theme for the school year!



### **November 9**

To prepare for their upcoming lessons on the history of logging, students are focusing on learning about the features of the coastal temperate rainforest. Students learned about nurse logs, fungi, ferns and parasites and then became each other's teachers/experts on the subjects! Next students will be learning about different tree species in the forest.



### **November 28**

After learning about the basics of the coastal temperate rainforest, students headed to the Rainforest Loop in Pacific Rim National Park to discuss the differences between old growth and second growth forest. Students learned about Alders, Hemlocks and forest succession, learned the key components of an old growth forest and compared it to a 2<sup>nd</sup> growth forest. Next up students will be learning more about the history of logging and the impact it has had on our communities.



### **February 20**

After studying the rainforest ecosystem last term, students got out to study an iconic tree in Tofino; the Eik Cedar. In 2001 the tree was assessed by an arborist and deemed a hazard. That year money was raised to have a girdle set up to prop the tree up so it could remain a part of Tofino's landscape. Students learned about the tree's history and discussed the ethical concerns related to keeping it alive. Afterward some controversial discussions and debate, students wrote a poem about the Eik Cedar tree, and reflected on the impact it has in our community.

## Ms. Bruhwiler's kindergarten class



### **October 17**

After learning about salmon lifecycles, investigating salmon eggs and spotting a mama bear with her cub at the hatchery, students headed to the beach to play a salmon lifecycle game!



### **October 25**

Mud mania day! Students learned about biotic and abiotic things in the mudflats, while getting really, really muddy. It was smiles for miles with these students!



### **November 16**

Students have been learning about bears and hibernation in class, and today students headed into the forest for a bear hibernation hunt! Students learned some key features of a good hibernation location, searched for hiding 'mini bears' in the woods, and then found their own best bear hibernating spot.



### **February 1**

Students are learning all about migration, hibernation and adaptation in animals and today they got to learn about how animals around the world survive and thrive! Students learned about humpback whale migration, orca blubber and waterproof feathers of seabirds! Then students learned about the different organisms that live in the Polar Regions and drew parallels between their life and the lives of animals found in our own backyard!

## Ms. Payne's grade 1/2 class



### **September 20**

Scavenger hunts in hand, students hit the trail to search for forest dwellers using all 5 of their senses. Then students learned about a few edible berries – how to identify them and their ecology – and had a berry-sampling extravaganza.



### **November 8**

Students reviewed characteristics of living and non-living things in the rainforest and on the beach during this excited adventure to Combers beach! After learning about photosynthesis and chlorophyll in plants, students sorted living and non-living things on the beach, and wrapped up with a beach clean up!



### **December 6**

After learning about characteristics of living and non-living things, students headed out into the forest and used their senses to learn about the key features of some of our most common trees here: including Western Hemlock and Western Red Cedar.



### **February 21**

Students headed out to learn all about Cedar trees! After learning some key identification features of this species, students collected cedar boughs on the ground to make leaf imprint art.

## Mr. Redican's grade 2/3 class



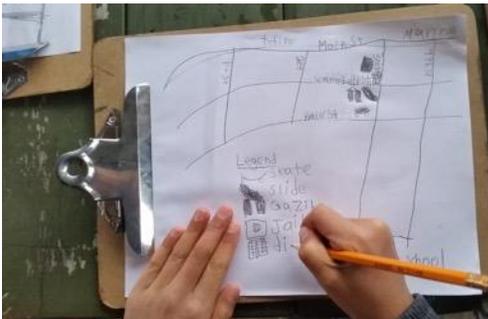
### **September 11**

Students are starting the school year by learning about slug slime and today they headed out on a hunt for tiny forest critters! With magnifying glasses in hand, students found spiders, flies and caterpillars, and ended their journey by finding tons of banana slugs in Slug Valley!



### **October 29**

Students are learning about bridges and other engineering structures in class, and today they headed out to a nearby bridge to draw out its key features including its strongest point, weakest point and its most artistically creative part. Then students discussed what events might lead to a log bridge getting washed out and brainstormed ways to make one stronger!



### **November 22**

As a preparation for their big Tofino water cycle mapping project, students learned some of the key components of a map by making their own map of downtown Tofino. Students walked through town while adding important sites of our town to their map, including the police station, the skate park and the spa. Afterward students worked together to make a mega map of Tofino and discussed the importance of maps. Next up students will learn all about where Tofino gets its water and will make a 3D model to showcase their knowledge!



### **December 4**

As the first part of their Tofino Water Project, students headed to the water tower to learn about one of the stops that water makes before it reaches our homes! Students discussed water volume, gravity and the importance of water conservation.

## Ms. Avila's kindergarten/grade 1 class



### **October 10**

Students are learning all about seasonal changes and today they headed to the mudflats to examine features of fall in the forest, and then learned about biodiversity in the mudflats, as well as care of plants and animals in this ecosystem.



### **October 24**

Students headed to Thornton Creek Hatchery to learn about the salmon lifecycle and got to observe a male and female salmon! Afterward, students headed to Big Beach to play a salmon lifecycle game, and to spend some time by the sea.



### **November 21**

Students have been practicing their drawing skills a lot lately, and today they learned about how to make a scientific drawing! After discussing a few key elements of a bona fide scientific drawing, students headed out to draw a few common local plants including a salal plant and a cedar bough!



### **November 29**

Grade 6/7 class has learned all about different intertidal organisms this fall, while Ms. Avila's class has been learning how to make scientific drawings for their nature journals – and today students got to join forces! Together, they headed down to the foreshore, where big buddies guided their little buddies through a scientific drawing of an intertidal organism, and older students imparted their knowledge of intertidal invertebrates throughout the outing as well!