



SEVENTH
GENERATION

club NEWSLETTER

SENIOR EDITION

Dear Club Members,

Welcome back to a new year with the Seventh Generation Club! Across BC, approximately 10,500 youth are members of the club. Our club is about supporting you to do your best in school, attend and participate regularly, and plan ahead for your post-secondary studies and career.

Mark your calendars for **Science Day** (November 20, 2020) and **Sports Day** (May 28, 2021).

We would like to receive art, photos, and writing from you. Send in your submissions through your club coordinator and don't forget to include a consent form, which can be found at seventhgenerationclub.com.

Have a great school year and stay healthy!



Volcanoes!

In the Nisga'a valley approximately 250 years ago, the Tseax Volcano erupted violently, sending lava flowing down into the Tseax River. Three Nisga'a villages were destroyed and 2000 people lost their lives.

The Nisga'a people remember this event in their oral histories. You can read the story about *Laxmihl: Where the Fire Ran Out* at nisgaanation.ca/volcano. It tells of Gwaxts'agat, a powerful supernatural being, that suddenly emerged to fight back the lava's advance and of how the villagers fled to escape the destruction.

(continued on page 2)



Science Day is November 20

The Seventh Generation Club would love to hear about science activities your club is doing, now or at any time of the year. Share your club news by emailing them to seventhgen@fnesc.ca. You may see them featured in future newsletters.

FALL 2020

THE SCIENCE ISSUE:

- Volcanoes
- Science Day
- Science Careers
- Paper Airplane Science
- Ocean Science
- Fall Science Contest
- Member Wall

"I studied science courses throughout high school and that helped me to see how much I enjoyed science because it gave me the ability to understand how things worked. Whether it was understanding how a machine worked, how an animal survived in its environment or how the human body functioned; various areas made things much more understandable."

Dr. Nadine Caron, Canada's first female First Nations general surgeon and a member of the Sagamok Anishnawbek First Nation



Digging Deeper into Science

Podcasts are a great way to explore science. Topics range from "The secret world of dust" to "Dreams: The science of a sleeping brain."

Wow! In the World

www.npr.org/podcasts/510321/wow-in-the-world

Brains On!

www.brainson.org

Quirks and Quarks

www.cbc.ca/radio/podcasts/science-and-tech/quirks-quarks/

Changing the Land with Fire

For thousands of years, Indigenous people have used fire to manage forests and grasslands. The timing and location of fires were based on traditional knowledge about their territories, built up over many generations.

Controlled burning can help renew the soil and clear land for important plants to grow, such as raspberries, camas, and grasses. Sometimes it was used to fireproof areas surrounding certain medicinal plants.

Here is just one example of how controlled burning has been used:

Annie York, Nlaka'pmx Elder, interviewed in 1991:

I've seen it, when the old people used to do it. I was just a little girl. I'd go up the mountain with granny. After we'd pick berries, my uncle would say, "It's going to rain pretty soon; time to burn." He stays up after we finished. Then, we go back the next year, it's all burned. Now, it turns into bush. That's why we don't get many berries any more. We're not allowed to burn.

Source: Nancy J. Turner, "Not One Single Berry"
Referenced in FNEESC/FNSA Science First Peoples Grades 5-9

Volcanoes *(continued from Page 1)*

Scientists are starting to appreciate how much there is to learn about earthquakes and eruptions from First Nations' oral histories up and down the west coast. Oral histories, combined with other techniques like radiocarbon and tree ring dating, build a much fuller picture of these geologic events.

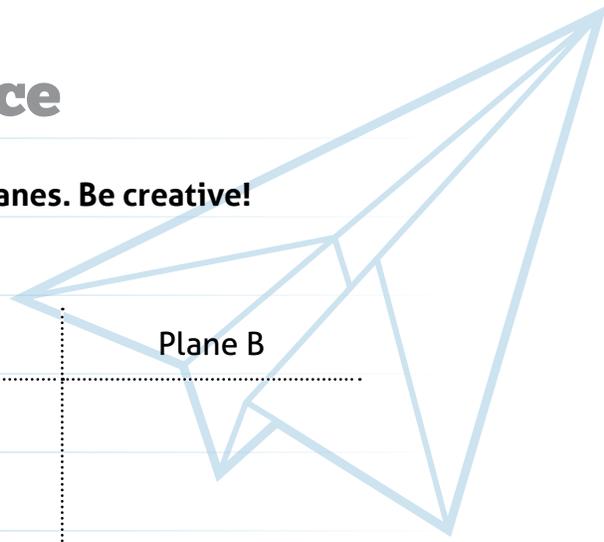
Geology is the study of the earth and what it is made of. First Nations remember geologic events through stories, names, art, and ceremonies. Today, even non-Indigenous scientists are recognizing that First Nations traditional stories are important additions to the study of geology.

First Nations continue to mark major geologic events. For example, after the magnitude 7.8 earthquake near Haida Gwaii in 2012, figures recognizing the quake were included on the Gwaii Haanas Legacy Pole, which was erected in 2013.

Paper Airplane Science

Step 1: Design and construct two paper airplanes. Be creative!

Step 2: Predict which plane will fly farther.



	Plane A	Plane B
List three different design features of each airplane		
Which airplane is more likely to fly farther and why?		

Step 3: Design your experiment

- Choose and mark your launching point
- Determine how you will measure the flight path (it needs to be something you can keep consistent, such as the length of your foot, a measuring tape, a book-length, etc.)
- Determine how many times you will launch each plane (we recommend at least 5)
- Create a table to record your data (below is a sample)

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
Plane A					
Plane B					

- Decide which plane flew farther in each trial.
 - Why do you think one plane flew farther than the other plane?
- Determine how to share your results
 - Create a video or a photo journal that shares your results
 - Draw a sketch of the planes that includes a description of the features
 - Write a report on your results (include your prediction, observations and conclusion)
- Using what you learned, build new planes that you predict will fly farther and repeat the steps!

Fall Science Contest

How can First Peoples' scientific knowledge and perspectives make the world a better place?

Enter by sending the Seventh Generation Club a poster, paragraph, photo essay, or poem to seventhgen@fnesc.ca, including your name and age.

Send in your entry by **December 18, 2020**. We have five \$100 prizes to award to club members. Please include a consent form, which you can find at seventhgenerationclub.com.

Diving Deep into Ocean Science

The ocean holds many secrets! One way to begin discovering the ocean is with underwater cameras and microphones.

Those tools make it possible for scientists around the world to work together to ask questions and make new discoveries about the health of our oceans.

Have a peek at ocean life with underwater cameras at Kitamaat Village, Campbell River, and Hartley Bay oceannetworks.ca/sights-sounds/live-video.

Calling Student Scientists!

Help researchers gather data from deep-sea videos with Digital Fishers at data.oceannetworks.ca/DigitalFishers. As you view various animals on the ocean floor, you can describe what you see by selecting from the fields below the video screen. Play a game and see interesting videos of our ocean, all while contributing to the scientific community.



Member Wall



Kumsheen Secondary



Glenrosa Elementary



Prince George Secondary

The Seventh Generation Club is coordinated by the First Nations Education Steering Committee and First Nations Schools Association, in partnership with the First Nations Health Authority and the Vancouver Canucks.



The Seventh Generation Club Office is located at: Suite 113, 100 Park Royal South, West Vancouver, BC V7T 1A2.
Phone: (604) 925-6087 **Fax:** (604) 925-6097 **Website:** www.seventhgenerationclub.com

If you have any questions, or would like to see something included in upcoming newsletters, write to the Editor at the address above, or send an e-mail to: seventhgen@fnesc.ca