



SCHOOL DISTRICT 5

S O U T H E A S T K O O T E N A Y

Grade 9

Learning Opportunities for the Week of: April 27 – May 1

Please refer to the learning plan mapped out below to establish a routine for your child during the time away from in class instruction. Please keep in mind your child's learning will look different and is **not meant to be a stressful experience**. Mrs. Fulton

LITERACY/LANGUAGES (30-45 minutes per day):

There are daily journal prompts in the portal under shared documents in a file called English. They are short, but thought-provoking and should take you no more than 10 minutes each day.

Creation Stories – The elements and examples

The activities that are listed below are a series of tasks that you will be asked to do to complete a cross-curricular science/English project. If you were in Mrs. Fulton's class, then you have already completed the Science aspect and will focus solely on the English portion. As you complete this project, I would like you to keep in mind that we live on the traditional, ancestral and unceded territory of the Ktunaxa people.

Task 1:

Go to the following website and read the creation stories. If you scroll down you will see blue, underlined words; when you click on them, they will take you to each story. When you are finished a story, simply click the back button in your browser and you will be brought back to the other stories.

- *Iroquois
- *African Bushmen
- *Greek
- *Australian Aborigine
- *Hebrew/Christian
- *Japanese

<https://www.cs.williams.edu/~lindsey/myths/myths.html>

What elements do you notice in the creation stories? In other words, what are some of the similarities between them? Some common themes?

NUMERACY (30-45 minutes per day):

Please login to Mathletics.com and complete the section(s) outlined by your classroom teacher.

Mrs. Fulton: We have been working on our geometry unit in Mathletics. As a culminating project I would encourage you to choose an object in your house and create a scale model of it. You can either scale it up (make it bigger) or scale it down (smaller). *Just remember that you need to change all dimensions by the same amount!* You can use paper (construction works best), clay, wood, cardboard, etc.... *Sketch the original object and the scaled model, labeling all dimensions.* Try calculating the surface area and volume of the original object and the scaled model. Use the basic formulas for surface area and volume to estimate. Project due May 15th. Continue working on your assigned Mathletics as well.

Formulas:

<https://www.eqao.com/en/assessments/grade-9-math/assessment-docs/g9-formula-sheet-academic.pdf>



Ms. Fillis: Please continue completing assigned activities including the unit test in Mathletics. Join the Zoom meetings on Tuesday at 11:30 am and Thursday



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Task 2:

Now go to the following website and read the Ktunaxa creation story.

<http://www.ktunaxa.org/who-we-are/creation-story/>

Do you notice any similarities between the Ktunaxa creation story and the others that you have read?

Task 3:

Choose one of the creation stories that you just read (Iroquois, Australian Aborigine, African Bushmen, Hebrew/Christian, Greek, Japanese) and compare and contrast it to the Ktunaxa creation story. Please use a Venn diagram for this task. You may draw and write on paper and then take a photo to put in your portfolio or you may create a word document with overlapping circles and type your ideas in...your choice.

at 2:30 pm to review concepts in algebra. You should be done the equations/linear equations unit this week. Email me if you are having issues.

SOCIAL STUDIES:

We are continuing to use the magazine this week:

<https://www.canadashistory.ca/getmedia/5d5f85e2-6985-453a-a62b-2b74451ca29b/KayDig2014CreatingCanada.pdf?xt=.pdf>

Please look at and read pages 14 & 15: The Fathers and the Others

1. Answer/do the following in paragraph form:

What is your opinion of the painting...
ELABORATE with details (please google the whole imagine, so it's not broken in half) Why do you think that it is "missing" the people that the onlookers stated? Think of how society was during that time. Was it fair and just? Do you

SCIENCE/INVESTIGATE/EXPLORE:

Mrs. Fulton: We are studying the cell cycle this week. I have attached a video and notes on the cell cycle. The notes can be found at the bottom of this document. Please complete the attached worksheet, take a picture of it, and upload your picture to the portfolio. I will be hosting a zoom class on Wednesday at 1:00 this week, check your school email for the zoom link.

Video:

<https://www.youtube.com/watch?v=QVCidNxJreE&t=302s>

Worksheet:

<https://www.commarkschools.org/Downloads/cell%20cycle%20worksheet.pdf>

Ms. Fillis: This week you have two tasks that you will do with other students:



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think it could have been different? Why or why not? What would have to have happened for it to be different during this time period. Are issues like this in Canadian society still? How so? Give 2 examples of it.

2. How many men were included in the painting? Tell me about at least 8 of them. Who were they and why were they significant? How did they become one of the fathers of confederation? How do you think Canada would have formed without them (this is your thinking and research). Give details and facts about them!
3. Then: look up what the painting was about, why was it important? Which 2 conferences was it in reference to? Pick one of these conferences and write or show what you have learned about it. (Pick a way that you get the information across and will be interesting and fun for you to do). As long as it is clear and contains the information, you can use any means you would like to.

You can choose to do #2 and 3 together and incorporate them in an assignment of your choosing or you can do them separately. Whichever you find works the best for you.

Please be sure to upload this week's learning opportunities into your portfolio. Any other learning opportunities you completed from other weeks please upload those as well.

Task 1: Connect with **one or two** other students and **exchange the electricity unit tests** you created last week.

Once completed, have the test writer send you the test answers and mark your test(s). **Upload the test and answers** you created as well as your **results** from the peer test(s) you wrote. (A mark out of 20) (**Block 4**, your second task will be to complete Mrs. Fulton's assignment since you have done the Planet Assignment.

Task 2: Organize group - In preparation for the "Ecosystem Planet Assignment", form a group of three to four students from your Science 9 class. Have **ONE** person in your group **report** back to me through **email** catherine.fillis@sd5.bc.ca with the following information: group members and roles, group's plan (how will you as a group complete the tasks of the assignment, how will you present your ecosystem/planet), and list the technology you will use to communicate within your group. There are many options: Office 365 SWAY, Sharepoint, Facetime, Zoom, etc. See the assignment below.



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OUTDOORS/HEALTHY LIVING:

1. Complete the **Physical Activity Log** for **April 27-May 4** for 3 to 6 days.

***To complete the LOG on your PHONE you must first download the FREE Microsoft Word APP on your phone.**

STEPS to find your LOG on the SD5 portal:

- Go to SD5 website www.sd5.bc.ca
- Go to “Utility Links” (top right-hand side of the page)
- **Web Sign In** (with your student#@sd5.bc.ca and your password)
- Go to the **Portal**
- Scroll to the bottom of the page until you see the PE class:



- Go to the “**ASSIGNMENTS**” tab at the top of the page
- OPEN the “**Physical Activity Log-Week 4-April 27-May 4**” by clicking on “**EDIT**”. **On your phone you must hit “DOWNLOAD”**.
- Complete your LOG for 3 to 6 days this week
- Close the document after it automatically “**SAVES**”

2. Try the **10 Yoga Challenges** for this week. Press **CTRL + Click** on the link below: https://sd5bcca0-my.sharepoint.com/:b:/g/person/heather_petters_on_sd5_bc_ca/EZZrPPfG99Cqvu19o8W1AkB7r3haGfGlnvhKkzqxq2dwrq?e=Z2hnQq

3. Go for **walks or bike rides** and use your senses:
 - See
 - Hear
 - Touch (but not people!)
 - Taste (but not people!)

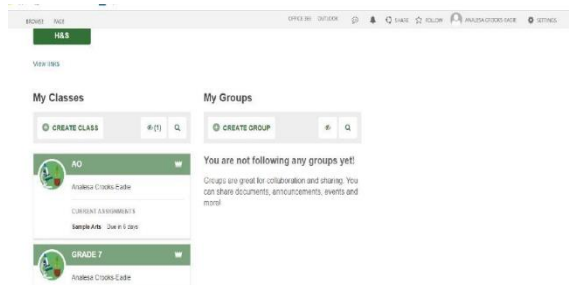
HANDING in your assignments:

How to get on to the portal at home:

1. Open web browser
2. Type www.sd5.bc.ca into the address bar
3. Click on the triangle drop down symbol beside “Utility Links”. This will be at top right corner OR at the bottom after scrolling down depending on your computer and browser.



4. Select “Portal” from the drop down menu.
5. At this time the student will be asked to enter their username and password (just like they are logging on to a computer at the school). Their username is numbers and their password was changed to their student number again (unless they have logged on in the last week). It will prompt them to change it (talk to you teacher contact if you haven’t done this).
6. Once on the portal, scroll down to their class at the bottom left of the screen. From there, all the programs we use are available with a click.





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- **Smell**

4. Once your **Physical Activity Log** is complete for the week of **April 27-May 4**:

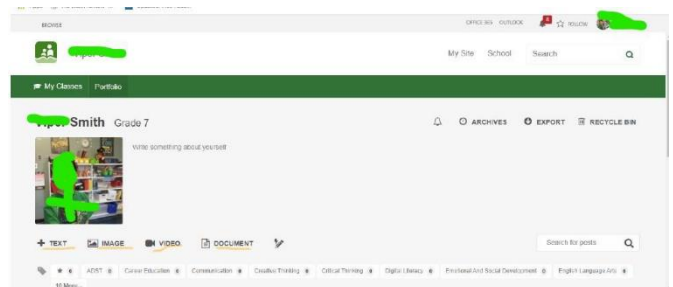
- Open it up in the SD5 Portal under “Assignments” & click on “EDIT”
- Click on **TURN IN** (near the bottom of the page) by **May 4**.
- Click on “COPY to PORTFOLIO”

Post Title, TAG “Physical & Health Education” and hit “SUBMIT”

7. Also, once on the portal students can select “Portfolio” from the horizontal list near the top of the screen to see some of their school work.



How to submit work through PORTFOLIO



1) When students complete a piece of work they are either going to go to their portfolio and add an "image" or a "document" or "text":

Image - they find the image/picture from their phone or computer...

Document - they find the document from their computer...

Text - they work in real time typing it into their portfolio

2) Every time something new is added (image, document, or text) to their portfolio a student should:

1) Give it a Title (at the top)



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2) Tag whatever subject it is

3) Hit submit at the bottom

3) If successful, the student will be able to see what they have added when they return to their portfolio.

***Here is the Website link:

<https://www.youtube.com/watch?v=lp92xHz60UA#action=share>

BE Proactive – Take the time to follow the assigned links before you start to make sure that they lead you where they are supposed to. If something isn't working, reach out to your teacher right away.

Pathways
to
Learning





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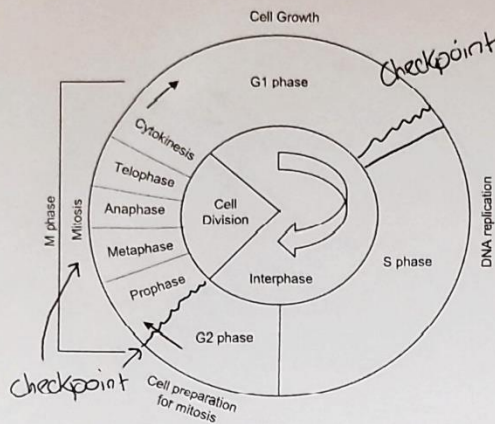
SOUTHEAST KOOTENAY

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THE CELL CYCLE & MITOSIS

Cell-File
Science



The Cell Cycle is a series of events cells go through as they grow and divide

During the Cell Cycle, a cell grows, prepares to divide (replicate DNA and organelles) and then divide to form two daughter cells → they begin cycle again

Interphase is the period of growth between cell division. 90% of time

Interphase is divided into three phases: G₁, S, & G₂

G₁ Phase

The G₁ phase is a period of activity in which cells do most of their growing. Cells will increase in size and synthesize new proteins and organelles

S Phase

The S phase replicates chromosomes and synthesizes DNA molecules. When DNA replication is completed, the cell enters G₂

G₂ Phase

During the G₂ phase, many of the organelles and molecules required for cell division are produced. When G₂ is completed, the cell is ready to enter the Mitosis (M) phase

Mitosis are divided into four phases: Prophase, Metaphase, Anaphase, & Telophase

Mitosis shortest stage. The division of the contents of the nucleus (DNA) creating 2 daughter nuclei

Cytokinesis - The division of the rest of the contents of the cell (cytoplasm and organelles)

Checkpoints - Specialized proteins that monitor cell activities & send info to nucleus → decides if cell is ready to divide
- Stop cycle if not enough nutrients, DNA is damaged, DNA has not been replicated

Checkpoints don't always work = CANCER
↳ uncontrolled cell division, they grow large & divide fast/often forming tumours



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What if you had the ability to create your own Ecosystem? What would you place in it? How would the organisms survive? Could you show the circle of life? How would your nutrients cycle? What would your food chains look like? Through this project, you will become the master of your own world!

Introduction

What exactly is an ecosystem and how important is maintaining one? I'm sure at some point you've been bit by an ant and thought "man I wish these didn't exist"....or a spider. What would happen if you could suddenly flip a switch and make certain plants (poison ivy), insects (wasps, ants), or animals (rats, crows) disappear? Do things in a certain area have a dependence on one another, or to a deeper extent, does the entire ecosystem depend on each individual part. Since a hawk depends on small mammals for its primary food, would it continue to thrive without a rat or mouse around?

We know that all of our energy originates from the sun and is utilized by the producers (plants), but beyond that each member of an ecosystem depends on another to attain the energy and resources it needs for survival. By removing one layer of a food chain or web, the entire process could very well fall apart.

Your assignment will be to create a fictional ecosystem and populate it (plants and animals). You must keep in mind that each level of an ecosystem or member of the community must have a role and consume something as well as BE consumed by something. All organisms must also be adapted to the environment you have created. You will also need to account for some of the nutrients that move and flow through an ecosystem (Carbon, Nitrogen, Water, and Phosphorus). **Remember that matter is never created or destroyed, so everything the system starts with, it must finish with.**

Variation: Take the local ecosystem and link traditional knowledge in with the organisms and cycles (will require talking to elders, locals...)

Presentation Format: 3-D models, story book, video, creative game, poster, PowerPoint, Prezi, etc... using some form of technology. You are also required to hand in any research notes with citations and also your food web.

Project Plan: Overview and Planning by May 1, Task 1 by May 8, Task 2 by May 15, Task 3 by May 22, Task 4 by May 29, Share by June 5

After deciding on your method of presentation, decide what each group member is going to be responsible for (research, drawing, poster making, game creation,) Have ONE member email me:

Member Names and Roles:

Title of Project:

Format of final presentation:



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Task 1

Question – difference between weather and climate? Between biome and ecosystem? Abiotic and Biotic?

Start by establishing your climate and abiotic factors (temperature, rain fall, soil type...), this is your foundation. Do a write up on your climate: describe temperatures, amount of precipitations, wind. You may want to do a climate graph to show how it changes over the seasons (or does it remain steady all year???) Have ONE member email me your climate.

Task 2

Question – What are trophic levels and how does a food chain work? What is the ultimate source of energy for our planet? How are your organisms going to reproduce- asexually, sexually?

You will then build each trophic level and consider the implication to the various cycles that are required. There will be a minimum of 5 levels of consumers/producers, and minimum 2 organisms at each level. The key will be working together to come up with a variety of species adapted to the climate, and also making them compatible with one another. The species one of you creates must be a predator of another, and so on. Create a description of each organism listing any adaptations, its trophic level, habitat, etc... include a sketch or picture.

Now that you have an array of organisms that are all well equipped to survive in the climate and geographic area you have chosen, connect the dots of the food web. You need to show the direction of energy flow (who is consuming who). Have ONE member submit this food web to me through email.

Task 3

Question - How do nutrients cycle through an ecosystem (carbon, water, nitrogen, & phosphorous)

Once the food web is complete, note where the nutrient cycles will fit. For example, "Where does pure oxygen become carbon dioxide?" or "In what ways can phosphorus get back into the soil?" You need to google the 4 cycles to see how all 4 cycles fit in with the biotic (living) parts of your ecosystem. At this point you may need to tweak your organisms. Either add on to your original food web or create a concept map that shows where the nutrient cycles will fit. "Where does pure oxygen become carbon dioxide?" or "In what ways can phosphorus get back into the soil?"



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Task 4

Putting it all together😊

Take all your information and put it together.

If you are having group dynamic issues, you need to email me ASAP so that we can meet and come up with a solution

Keep a record of your tasks, what you do to contribute to the project, and any feedback on your contribution from group members

Week	Task/	Self-assigned homework	Group Feedback
1			
2			
3			
4			