Centreville Community School

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Grade 7 HOME LEARNING PLAN - May 4th to 8th

Grade:	**7**
TEACHERS	**Grant Robinson, Iris Hitchcock, Kim Foster, Angela Taylor and Melissa Richardson**
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In accordance with the communication sent from our Minister of Education, Dominic Carty, on April 2, 2020 Home learning opportunities to support literacy, numeracy, science and social studies outcomes will be made available online weekly by Middle School Teachers.

Families are encouraged to:
-Support their children to complete the options below for an average of **two hour per day**.
-Read aloud with their children daily; and
-Consider daily physical activity and free play as an important part of their child's mental health and skill development.

Subjects	Description of Learning Activities
Literacy If you want to "pass in" your weekly writing piece to the group "English Language Arts 7-7H" in Microsoft Groups, under assignments, there are the weekly descriptions. I will provide feedback of what you're doing well and what you need to keep working on.	**WRITING** - Keeping a daily journal is a great way to get your thoughts down on paper about what you've been doing during the day, you can make up a story about whatever you want to write about or do an informational report about something you're interested in. It can be on paper or on the computer. Middle School students should be able to write at least ¾ to 1 page for each journal entry. For this week's special Writing piece, write about someone who inspires you or motivates you to be a better person. This could be a parent, sibling, neighbor, other family member or anyone who you want to be like. For example, my mum lost over 40 lbs and is a breast cancer survivor. She inspires me to keep working towards my goals and shows me that I need to live each day to the fullest, enjoying my family and friends every day. You should be able to write at least 3 paragraphs on this person or do a couple of short pieces if you can't decide on just one person. **For everything you write:** please remember to use periods/punctuation, capital letters where they are needed and check your spelling of words you're supposed to know. I put a picture of the Writing Traits that are up on my bulletin board for Grades 6 and 7. Grade 8's can use the Grade 7 ones. They're pretty much the same for all Middle School students. **Please make sure you are using the Writing Traits list and check your work over to make sure you're doing the best you can do.**

You can also email your work to me at: iris.hitchcock@nbed.nb.ca Your Reading Response assignment is in there too, if you want to send it to me.

READING – You should be reading at least 30 minutes each day. This could be any of the following: books, magazines, newspapers (yes, they still make paper ones but you could read online news too), online blogs, articles, e-books (borrow some from the public library). You could read to younger siblings too. Once a week, I would like you to write a response to something you have read. You could tell something about the characters, setting, what is happening in the story, any interesting words you find, your favorite/least favorite part or predict what will happen in the next part of the book. If you are reading non-fiction (informational) material, tell 4 things you learned that you didn't know before or something you already know that wasn't in the article.

Weekly Editing Challenge: There are 10 errors in the following passage. Some are misspelled words, capitalization errors or punctuation mistakes. Rewrite the passage, making the necessary changes.

Has you read *The Polar Express* or *jumanji*. The author of them books Chris Van Allsburg, was born on June 18, 1949. Van Allsburg has childhood memorys of some people who wanted him to hold a football instead of crayons, but he still become an artist. He never thought about writing childrens books until his wife invited an author to dinner won night. His first picture book was The Garden of Abdul Gasazi.

Grade 7 Social Studies

If you have any questions about the Social Studies activities, please contact-

Melissa Richardson melissa.richardson2@nbed.nb.ca

If you would like to submit your completed products for feedback, you can email the doc or pic to the above email address.

Women's Right to Vote in Canada - The Famous Five

Research some of the key women in Canada's suffrage movement by watching the following videos:

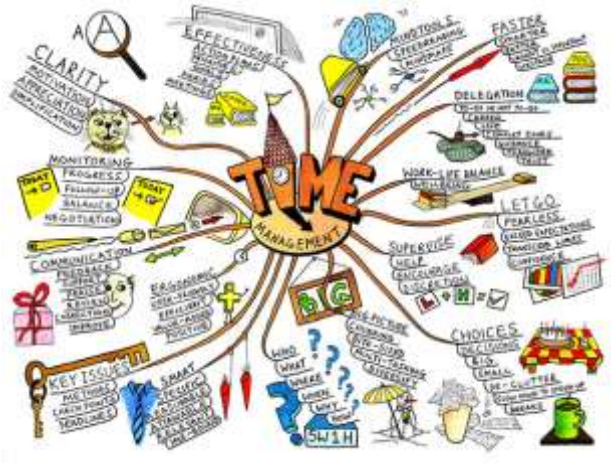
- https://www.cbc.ca/kidscbc2/watch/canadoodaday/canadian-women-who-kicked-butt
- https://www.canadashistory.ca/explore/women/women-win-the-vote
- https://www.youtube.com/watch?v=gFD3san49W8
- https://www.youtube.com/watch?v=25nVX54x8w0

visiting the following websites:

- http://www.famou5.ca/the-famous-five-women
- https://www.thecanadianencyclopedia.ca/en/article/famous-5
- https://www.canada.ca/en/canadian-heritage/services/art-monuments/monuments/women-are-persons/video-women-are-persons-youth-version.html

and/or reading the information sheet below.

Product: Pick one of the Famous Five and write her name in the center of an 8½ x 11 piece of paper. Create a Mind Map (see picture) to show/record all the information you have learned about her (this can be in jot form). Add some colour and illustrations to help enhance your final product.



Feel free to upload them to Microsoft Groups, under assignments, as well. A Social Studies 7 - 7H group has been activated for those who are interested.

Canadian History: Women Get the Vote!

Women and Representatation

We know that for at least forty years, females have made up slightly over half of the Canadian population. This number is based on census data: the aim of the census is to record everyone living in Canada; it is taken every ten years. Although the population is almost evenly split between males and females, women have a longer life expectancy and as people get older; the numbers change. By age 65, there are more women than men, and the gap grows as men and women age.

How well are women, at just over 50% of the adult population, represented in our federal government? In a hundred years of female representation, the numbers have changed drastically, but women are still not represented at the same level as men the federal government. As of September 2019 about 25% of the Members of Parliament are women.

Nellie McClung

Nellie McClung became involved in political affairs when she was teaching near Manitou, MB. McClung joined the social and political movement known as the Woman's Christian Temperance Union, which supported women's rights and advocated the abstinence from alcohol for everyone (alcohol abuse was a serious social problem in the early 1900's. In 1911 the McClungs moved to Winnipeg where she became involved in the women's suffrage movement, becoming a prominent speaker for the cause. She contined her work after moving to Alberta and was one of the "Famous Five" women who fought to have women recognized as legal "persons".

Agnes Macphail

Agnes Macphail was born into a farming family in central Ontario. Her family did not want her to attend high school, but she did, and eventually became a teacher before her interest turned to politics. Macphail was the first woman to serve as a Member of Parliament from 1921-1940. In 1940 she ran for member of the Legistative Assembly of Ontario and was one of the first women elected as a MLA.

Macphail was a founding member of the forerunner to the modern New Democratic Party and was the first woman to represent Canada at the League of Nations, an international body that existed between the two World Wars, similar to the United Nations.

Lousie McKinney

Louise McKinney believed that the purpose of a woman's life was exactly the same as a man's: to make the best contribution possible to her generation. She was the first woman ever elected to a Canadian legislature and, for that matter, in the entire British Empire. She was a determined, outspoken member of the Famous Five. McKinney started her working career as a school teacher. She played a key role in the fight for women to get the right to vote. She was elected to the Alberta Legislative Assembly in 1917. McKinney championed the rights of immigrants, widows, separated women, and the disabled. Her efforts led to the passing of a bill that gave a woman the right to prevent the sale or mortgage of her home without her knowledge.

Grade 7 Numeracy

If you have any questions about the Numeracy activities, please contact-

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May 4th to May 8th – Offline Math Choice Boards (Grade 7)

Monday	Tuesday	Wednesday	Thursday	Friday

What does it mean when lines are parallel? What does it mean when lines are perpendicular? Draw a set of parallel lines and a set of perpendicular lines.

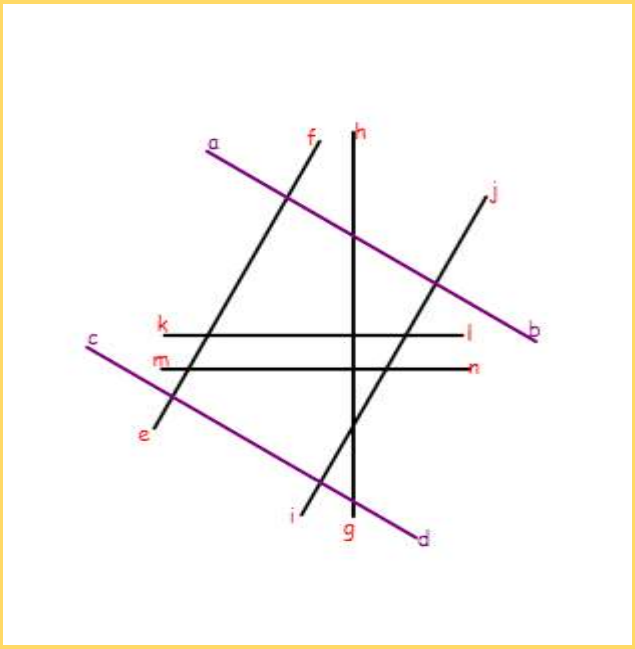
Create three subtraction sentences that would have an answer of $\frac{3}{4}$.

Draw pictures to help.

(Hint: start with a drawing that shows the answer = ¾)

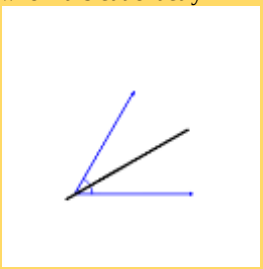
Record as many of the line segments on the diagram below that are parallel to each other as you are able. Do the same for the perpendicular lines. (eg. line segment ab is parallel to line segment cd)

Find and list examples of parallel and perpendicular lines around your home. (inside and outside)

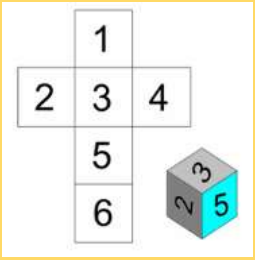


A line is bisected, when it is cut exactly in half. Using a straight edge or a ruler if you have one, draw a line segment that is about 12cm long. Find and describe two different ways to bisect this line.

An angle is bisected, when it is cut exactly in half, like the example here. Using a straight edge or a ruler if you have one, draw an angle. Find and describe one way to bisect your angle.



Find a small sized box that you can cut up. Use it to make 6 equal sized squares. Use these squares to build a net of a die. (remember that opposite sides always add to 7 on a die that is numbered 1 to 6.)



*Net: A pattern that you can cut and fold to make a 3D shape. This is the net of a die, but the numbers are in the wrong positions:

May 4th to May 8th – Offline Math Games (Grade 7)

Math facts
Daily Practice, 10 minutes
Make cue cards with multiplications from 1 x 1 to 12x 12 on the front of the cards. On the back of the cards, write the answers. Use these to practice multiplication skills! (For a challenge, you can time yourself and see how many you can get right in a certain amount of time and set a goal to see your improvement!)

Probability Dice Game *or* **Integer War Game – See week of April 20th for rules**

Play Multiplication or Addition War! – See week of April 14th for rules

May 4th to May 8th – Online Math Choice Boards (Grade 7)				
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Game 1 – Equivalent Ratios. Probability	Game 2: Equivalent fractions	Game 3: Adding Fractions Dirt Bike Proportions	Game 4: Area and Perimeter	Game 5: Rotations Transformation Workshop
IXL Online Practice - I have a 30-day free trial and have set all middle school students up with a username and password. If you didn't receive the email from IXL with this information, please let me know and I will forward it to you for your child. I have tagged the activities, right in IXL, which your child may wish to try. The headings listed below tell sections related to the learning activities for the week. Click this link to go to Grade 7 IXL online activities: IXL Online Practice for Grade 7				
Two-dimensional figures	Constructions	One-variable equations	Add and subtract fractions	Add and subtract fractions
A chance to practice your multiplication skills: Mr. Boyd reads: The Best of Times				

May 4th to May 8th – Online Math and Tech Games (Grade 7)
Some Middle School Web Sites for Math, Tech and/or Science www.everfi.net Sumdog (I only have passwords for grade 6) Hour of Code https://www.typing.com/ **Check out the Code.org resources for students at home** **And take a weekly Code Break every Wednesday with special guests!** **Sources for offline and online learning:** Teaching Student-Centered Mathematics Gr. 6-8 John Van de Walle, Making Math Meaningful Marion Small, 2013 Box Cars and One-Eyed Jacks Jane Felling "The Roll Out Fractions Game: Comparing Fractions" by Enrique Ortiz in Teaching Children Mathematics, August 2006

Grade 7 Science

If you have any questions about the Science activities, please contact-

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This week for Science the focus is on Flight. You can gather some recyclable materials such as paper and string to perform a few experiments. Do you remember the Scientific Method? Do you remember playing Scientific Method Bingo and learning some of steps to follow when performing an experiment? If you have time, send me an email with the steps you remember.

If you are able to get online, try out some of these fun flight games. https://www.grc.nasa.gov/WWW/K-12/UEET/StudentSite/funandgames.html

Flight Activity #1

Make a Better Paper Airplane

What child hasn't spent time making a paper airplane? Why not turn this common pastime into a lesson on the physics of aerodynamics and flight? This is a great activity for students of all ages, but older students should have a greater understanding of fluid dynamics and be able to push the outer limits of paper airplane design!

What You Need:

- Various types of paper (any paper around the house is fine, but try to locate papers with different weights and thicknesses)
- Stopwatch
- Possible other materials include paper clips, stapler, scissors, and glue as needed by design

What You Do:

1. Brainstorm ideas with your kid about what makes a good paper airplane. Talk about the different variables that can be changed (a type of paper, folding pattern, other materials used) and how each of these may influence the flight of the plane. Physics concepts to consider:
   - Archimedes' Principle – An object surrounded by air is buoyed up by a force equal to the weight of the air displaced. If your budding Orville Wright uses heavier materials in the plane construction, your learner needs to take into account that more air must be displaced in order to keep the plane aloft. Your child should consider compensating with a broader wingspan.
   - Bernoulli's Principle – When the speed of a fluid increases, pressure in the fluid decreases. In this case, the fluid is air. In order for a plane to stay airborne, there must be less pressure above the wing then below it. This allows the greater bottom pressure to exert an upward force on the wing, giving the plane lift. In order to accomplish this, wings tend to have a greater surface area on the tops than the bottoms. Picture the curved, slightly upturned, top of a wing. Now, as the plane moves through the air, wind must travel faster over the curved top of the wing than the flat bottom of the wing, providing lift.
   - Air Resistance – Friction causes drag, an opposing force to the forward motion of the plane. In order to decrease air resistance, your child should consider an aerodynamic design that allows the plane to "slice" through the air. Possible design accommodations should include a pointed nose and smooth body.
2. Gather the materials and each of you make an airplane that you think will stay airborne the longest.
3. Let the competition begin! Either head outside on a calm day or find a large enough space to fly your planes indoors. Each person should take a few practice throws, then take turns having one person fly his plane while the other person times the flight. See whose plane stays airborne for the longest time!
4. Discuss the differences between your planes and why the winning plane flew longer than the other plane. Consider hitting the drawing board with new designs for a rematch! There are loads of sites on the Internet with various paper airplane designs. Consider visiting a few and seeing how their designs compare to the designs used by your child.
5. Turn up the heat on the competition and change the goal! Who can design the best trick airplane? Highest flying? Fastest?

Please send me some of your favourite airplane folding directions or websites with directions. Have fun!

Flight Activity #2

*** Please be careful if you stand on a chair or ladder! Please have an adult assist you with this experiment. ***

How Do Different Materials Affect Air Resistance?

Grade: Middle School; **Type:** Physics

Objective:

This project will examine the relationship between materials and air resistance.

Research Questions:

- Do different types of materials affect air resistance differently?
- Which types of materials have the greatest affect on air resistance?

Air resistance is a crucial factor when designing a parachute. Discover what type of material will work best as a parachute.

Materials:

- Large plastic bag
- Paper
- Handkerchief
- String
- Clay
- Single hole punch
- Chair or ladder
- Timer
- Ruler
- Scissors
- Another person

Experimental Procedures:

1. Cut a square from the plastic bag and a square from the paper that is the same size as the handkerchief.
2. Cut 12 six-inch pieces of string.
3. Tie one piece of string to each corner of the plastic square.
4. Tie one piece of string to each corner of the handkerchief.
5. Punch a hole in each corner of the paper and tie a piece of string through each hole.
6. Attach a ball of clay to the bottom of the plastic square, paper square and handkerchief. Use the dangling string pieces for the attachment.
7. Stand on a chair or ladder.
8. Drop each parachute at the same height from the elevated location.
9. Have another person record the time from the moment the parachute is release until it hits the ground.
10. Analyze your data to determine which parachute material dropped the fastest. Which material has more affect on air resistance? Which material would make the best parachute?

What other materials did you find around your home to use for your parachute?

Why did you choose those materials?

Did you use string to attach your parachute together or did you find another material? How did it work?

What did you place at the bottom of your parachute for a weight? Was it a ball of clay like suggested or did you use something else?

Flight Activity #3

Break the Egg

In this simple science experiment, your child will learn how lightweight Styrofoam protects a fragile object in a fall in the same way that it protects your head, in the form of a bicycle helmet, when you fall while biking. This experiment helps illustrate the importance of wearing a bicycle helmet whenever biking; the human head, fragile like an egg, can easily be injured in even a minor fall or collision. After this experiment, your child will never go helmet-less again!

What You Need:

- One small egg
- Styrofoam ball large enough to contain the egg
- 2 wide rubber bands
- Small, sharp knife (serrated works best)
- Teaspoon
- Flight of stairs or a stepladder

What You Do:

1. Have your child carefully cut the Styrofoam ball in half.
2. Have your child remove just enough of the interior of the ball with the teaspoon so the egg can fit inside.
3. Place the egg inside the ball.
4. Have your child put the two halves of the ball back together and secure with the rubber bands, placing them in a criss-cross pattern.
5. Assist your child in climbing onto the stepladder or up the flight of stairs.
6. Have your child drop the Styrofoam ball.
7. Remove the rubber bands and open the ball.
8. Observe the result. Did the egg break?

What Happened?

The Styrofoam absorbed the energy of the impact generated by the egg's fall. A similar result occurs when you fall and hit your head while wearing a bicycle helmet; the Styrofoam in the helmet helps absorb some of the shock from the fall and protects your head against injury. Wearing a bicycle helmet, however, is not a substitute for safe bicycling habits. Even a helmet won't protect you from a severe impact.

Fun Styrofoam Facts:

What is Styrofoam? It is made of polystyrene, a kind of plastic. Polystyrene was first produced in the form of pellets (a precursor to Styrofoam peanuts) in 1931.

Molded Styrofoam, the kind that computers and other fragile objects are shipped in, was not created until 1959. Because of its unusual chemical structure, Styrofoam is very dense and strong.

How is Styrofoam formed into a bicycle helmet and other shapes? Air or other gases are mixed with melted polystyrene, then blended at a high speed.

Did you have a Styrofoam ball at home to use? I did not have one. If not, what did you choose for a material instead? If you email me with your results, I will email you what I used and the results of my experiment. Good Luck!

Physical Education

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Phys. Ed. activities for middle school students will be posted by Mr. Robinson weekly. You can find these under "Class Announcements > Phys Ed 6-8" on the school website.