Home Learning Activities: Week 10

Grade 7M – Mr. Methot

**Since this is the last week of home learning, I won't be teaching any new concepts/outcomes. Just continue with activities and lessons to practice what we have been looking at for the past couple of weeks. Have a great summer!

Math:

- Netmath – There are no new lessons this week, so you can work on any previous lessons that are unfinished. Log in at www.netmath.ca.

- Dreambox – There are 2 lessons assigned, and they are marked with a blue star. These lessons practice identifying and plotting points on a Cartesian plane. Log in information can be found in the document called "Dreambox 7M".

- Breakout EDU – There are 3 games for you to solve. Log in at https://student.breakoutedu.com/login. Good luck!

  Class code: RY71AF

- Problem of the Week – This week's problem: https://cemc.uwaterloo.ca/resources/potw/2019-20/French/POTWC-19-ME-NN-PA-11-P-f.pdf

  Solution to last week's problem: https://cemc.uwaterloo.ca/resources/potw/2019-20/English/POTWC-19-GS-ME-28-S.pdf

Solution to this week's problem:
https://cemc.uwaterloo.ca/resources/potw/2019-20/French/POTWC-19-ME-NN-PA-11-S.pdf

- Scavenger Hunt – A fun activity to get outside and search for math objects! Check out the file titled "Chasse au Trésor de Maths".

- Creating Designs on a Cartesian Plane – In the document titled "Activités de dessiner avec un plan cartésien" there are a couple of art activities you can do on a Cartesian plane.

- Battleship – Using a Cartesian plane, plot 10 points scattered in the 4 quadrants. With a partner, take turns guessing the coordinates of your partner's plotted points. The winner will be the first player to identify the correct location of all 10 of their partners points. You can use graph paper to create Cartesian planes to add coordinate points. If you do not have graph paper, you can use the Cartesian plane provided in the document titled "Plan cartésien (4 quadrants)"

- Map Activity – Using a Cartesian plane, you can create a map of an area that you are familiar with. Maybe you want to make a map of your house, or your neighborhood, or the school, or even the entire city of Miramichi. Plot points on your map to represent locations on your map. For example, if you decide to map out your neighborhood, you might have one point that represents your house, other points that represent your neighbors' houses, and even a point that represents a fire hydrant down the street. Once you have plotted all your points, you can add details by sketching buildings, houses, rooms, etc. and even colouring them. Lastly, identify the coordinate points of every point that you've plotted on your map. For example, your house might be plotted as (-5,3) on your map.

  You can use graph paper to create your map to add coordinate points. If you do not have graph paper, you can use the Cartesian plane provided in the document titled "Plan cartésien (4 quadrants)"

- Online Cartesian Plane Games – Here are some fun interactive games to enhance your understanding of identifying and plotting points in all four quadrants of a Cartesian plane.
  https://www.mathnook.com/math/skill/coordinategridgames.php

- Middle School Math Games – Here is a website with a variety of middle school math games and activities. Some are online and other are hands-on opportunities.
  https://www.learn-with-math-games.com/middle-school-math-games.html

- Summer Math Activities – Here is a website with a variety of fun, hands-on activities, many of which can be done outside in the summer weather. A few that I would suggest trying are: #16, #11, and #3. If you decide to try the water balloon activity or designing your own math game, you can include any math concept that you've learned this year (fractions, decimals, adding/subtracting negative/positive integers, etc).
  https://blog.mindresearch.org/blog/summer-math-activities-for-kids

STEAM & Science:

- Week 10 Challenge – Check out the attached files. Feel free to try any of the other cross-curricular activities, including the numeracy activity. Have fun and share on Teams if you want!

- Challenge Cards – In the document titled "Expériences de Sciences" there are 44 science and engineering challenges that you can try. Feel free to perform and attempt whichever ones you want.

- Volcanic Eruption – Here is a pretty cool step by step video that explains how to build your own volcano and the ingredients you can add to make it

erupt! It could get messy however, so this would be a good activity to do outside perhaps.
https://www.youtube.com/watch?v=DCD4pcSu1M0&list=PLQlnTldJs0ZQmYcKNCBTiv2Ea64Qg0GJo&index=12&t=0s

- Model of the Earth – You can sketch out a coloured model of the Earth on paper if you want. Be sure to label the layers of your model. You could also find some materials around the house, such as modeling clay or Lego, to create a model of the Earth with its different layers. Some ideas are included in the link below. You can share pictures of your creations on Teams! 😊
https://www.steampoweredfamily.com/activities/10-layers-of-the-earth-projects-for-kids/

Videos:

- The Cartesian Plane - https://www.youtube.com/watch?v=-25cZIdW3uw&list=PLrt_BPqnOBnPGUt_eYUW55Qxfh4TJmOth&index=3

- Plotting Points – https://www.youtube.com/watch?v=kvjfxeOgOqU&list=PLrt_BPqnOBnPGUt_eYUW55Qxfh4TJmOth&index=2

- Identifying Points – https://www.youtube.com/watch?v=1zlJ9KSI_8U&list=PLrt_BPqnOBnPGUt_eYUW55Qxfh4TJmOth&index=13

- Cartesian Plane and Shapes - https://www.youtube.com/watch?v=pv3_WsZGYNM

- University of Waterloo Lesson Videos – Here are some videos that can help explain this week's concepts. Check out lesson #3 → "The Cartesian Coordinate System".

  https://courseware.cemc.uwaterloo.ca/27?gid=85

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Enjoy your last week of home learning before summer!