**Math: RESOURCES FOR TEACHING MATH DURING ON-LINE LEARNING**

**General/Multi-Grade**

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| YouCubed-tasks and motivational videos that are searchable by grade. | <https://www.youcubed.org/> |
| BCAMT Weekly Rich Tasks (Grade 4-12) | [**https://www.bcamt.ca/weeklymathtasks/**](https://www.bcamt.ca/weeklymathtasks/) |
| Desmos Webinar & Resources | <https://learn.desmos.com/coronavirus> |
| Math Teaching Resources by Dr. Peter Lijedahl | <http://www.peterliljedahl.com/teachers> |
| National Library of Virtual Manipulatives (Pre-K - 12) | <http://nlvm.usu.edu/> |
| Numberphile—curated videos about math, includes some content on coronavirus | <https://www.numberphile.com/> |
| Open Middle Math Tasks | <https://www.openmiddle.com/> |
| Nelson Open Access Resources (includes some math books): | <https://www.nelson.com/learningonline/k12openaccess/>  |
| Pearson Open Access Resources (includes math books): | <https://www.pearsoncanadaschool.com/index.cfm?locator=PS3eZw> |
| This is a comprehensive listing of educational publishers/vendors offering free access at this time.  | <http://amazingeducationalresources.com/> |
| NCTM Webinars… you don’t even have to be a member to access them.  | <https://www.nctm.org/100/> |
| Knowledgehook is a formative assessment tool open to ALL schools  | <https://www.knowledgehook.com/> |
| Janice Novakowski, Richmond | <https://blogs.sd38.bc.ca/sd38mathandscience/bc-2020-continuity-of-learning/> |
| Surrey’s offerings | <http://bit.ly/sd36CLnumeracy> |
| Delta’s offerings | <https://deltalearns.ca/learnathome/>  |

**Primary**

K-1: Math for Families by BC Numeracy Network (English, Chinese, Punjabi)
English: <https://drive.google.com/file/d/19Tm8ZGn26ixb23-eciVhOjG1uY7Nv7n1/view>

Chinese: <https://drive.google.com/file/d/10JqZsPaHRFztan9uR8HMJIHHMS9GFSEc/view>

Punjabi: <https://drive.google.com/file/d/1YYj_cdCqBd_JxxratKh5lrflM0toqE57/view>

Zorbits: This on-line company is giving free access to Burnaby School District. The site will link the BC curriculum when parents input the child’s school. We have had a little test group in the district, and it gets good reviews:

Zorbits for parents:

[https://go.zorbitsmath.com/free-parent-access](https://app.salesforceiq.com/r?target=5e723937c9e77c00742c958d&t=AFwhZf0DO64Yd1fYGW3elLxF0gpB9me2IZRGng3WOtwC4Kj-Z9ICK501_UfDmtbfDHxfAV1_VziO2KeP3D_TjU4KFRsZwLB5j6mShBZi8SHdDUeKW88PV1b0N1BTYVjOCMT7ZVoCakLV&url=https%3A%2F%2Fgo.zorbitsmath.com%2Ffree-parent-access)

Zorbits for Teachers:

<https://go.zorbitsmath.com/free-teacher-access>

Here’s a source of math stories that may be useful to some parents:
<https://mathsurprise.ca/stories/>

Fluency Ideas from Scholastic: <https://www.scholastic.com/teachers/articles/teaching-content/7-games-practice-math-facts/>

**Grades 4 & 5**

Some fluency practice games (dice/paper and pencil): <https://nrich.maths.org/9413>

Fawn Nguyen has developed the following activities:

Grade 4 (US): <https://docs.google.com/document/d/1ie6PxZdFQ9y49EInP6ZLOamxaVButnGMawNWM-rWER0/edit>

Grade 5 (US): <https://docs.google.com/document/d/1xl7gT4VdFjjzkSfBtoCdLOiTP-RsNLvWvSJwplfsIpY/edit>

**Grades 6 and 7**

Interactive games for Gr 6 and 7 students: <https://nrich.maths.org/9465>

Fawn Nguyen’s Activities:

Grade 6: <https://docs.google.com/document/d/1_662aWIzryVtmYyrOzhr7Awufpqe0sgWgMuN4o6pDKQ/edit>

Grade 7:

<https://docs.google.com/document/d/1ibAp_xSGAKj6OzdRz__FxCG4G1vJQUCiweYB6TtHOTg/edit>

**Math 8-9**

***Fawn Nguyen has created 4 weeks worth of math questions for Gr 8 (\*US curriculum):*** <https://docs.google.com/document/d/1PjtShbKJh5lesjUkTrMr51oH4MNux9PurnnUHATeWYo/copy>

***Lord Byng’s Math 8 resources available freely:*** <https://onedrive.live.com/?authkey=%21AH5AOWfDjXerdQM&id=6F430A17867D35D%211000&cid=06F430A17867D35D>

***This has complete on-line courses, 9-12 (including Workplace and Foundations):*** [***http://studymatrix.net/***](http://studymatrix.net/) ***(9-12 only)\*Check, may be old curriculum***

CEMC has lots of great resources and matching curriculum maps for BC:

<https://cemc.uwaterloo.ca/resources/courseware/courseware.html>

<https://cemc.uwaterloo.ca/resources/courseware/grade-9-10-11-curriculum-maps.html>

This resource was put together by our very own Moscrop and South teachers: <http://www.bcmath.ca>

**Math 10-12**

CEMC has lots of great resources and matching curriculum maps for BC:

<https://cemc.uwaterloo.ca/resources/courseware/courseware.html>

<https://cemc.uwaterloo.ca/resources/courseware/grade-9-10-11-curriculum-maps.html>

This resource was put together by our very own Moscrop and South teachers: <http://www.bcmath.ca>

***Note: studymatrix is the old curriculum I’ve been told***

[***http://studymatrix.net/***](http://studymatrix.net/)

<https://www.mathbaron.com/bc-teaching-notes.html>

PreCalc 12 Workbook from Dan Kamen: [https://1drv.ms/u/s!Al3TZ3ihMPQGh2J-QDlnw413q3UD?e=SDdgqq](https://1drv.ms/u/s%21Al3TZ3ihMPQGh2J-QDlnw413q3UD?e=SDdgqq)

On the COVID pandemic:

Excel model in “flattening the curve”: <https://aaronbohnen.ca/pandemicmodel>

A lesson in how pandemics spread (with a simulation) Gr 9-12:

<https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Pandemics-How-Are-Viruses-Spread/>

Ordinary Differential Equations and COVID-19

This is a lecture from John Stockie’s undergraduate class in numerical analysis about applying Euler's transmission of an epidemic like COVID-19. The talk assumes only an elementary knowledge of the derivative as a rate of change, and the forward difference approximation for the derivative. I derive Euler's method for a simple ODE and then derive the SEIR model and illustrate its application to several aspects of the COVID-19 epidemic. The presentation is just under 50 minutes long and is posted on YouTube as three separate videos:

 Part 1: <https://youtu.be/Sjz39GKp7dY> Part 2: <https://youtu.be/kH4mOU1wXR0> Part 3: <https://youtu.be/nrpmv-zJH7E>The slides I presented in this talk can be downloaded from <http://www.math.sfu.ca/~stockie/covid19.pdf>

**Math Fun and Games**

isthisprime.com/game/

Problem of the Week and Month:

<https://cemc.uwaterloo.ca/resources/potw.php>

<https://cemc.uwaterloo.ca/resources/potm.php>

Math Playground

<https://www.mathplayground.com/math-games.html>

Nelson Webinars for Parents and Teachers:

<https://www.nelson.com/learningonline/pl.html?utm_source=newsletter&utm_medium=email&utm_campaign=pl_covid_19>