ONLINE SCIENCE RESOURCES

This is a list of online resources that Science East put together for the Department of Education in Spring 2020, with a couple of additions. The sites represent some of our favourites and whilst they might not always match the NB curriculum, they do offer lots of great activities for different topics with a focus on skills and inquiry.

<https://www.howtosmile.org/>

A collection of searchable links to science activities on websites run by science museums and other science education groups in the US.

Grades K-12

Tags: Science; Design and Build

<https://education.sciencenorth.ca/>

Education site created for Ontario teachers by Science North. All the content is available in both languages, and divided by Grade level. A really impressive collection of material.

Grades K-12

Tags: Science

<https://www.acs.org/content/acs/en/education/resources.html>

The education section of the American Chemical Society site – they have some of their own resources, plus links to other sites. There is a lot of relatively prescribed activities but it is a good starting point for chemistry ideas.

Grades K-12

Tags: Chemistry

<https://science.howstuffworks.com/>

Subsection of a website which is a good resource for answering general science questions, featuring a decent amount of pictures and diagrams.

Grades K-12

Tags: Science

<https://undsci.berkeley.edu/>

University of California at Berkeley site on scientific process, with specific sections with teacher resources such as lesson plans.

Grades K – 12

Tags: Science

<https://www.pbslearningmedia.org/subjects/science/>

Video clips, Interactives, Lesson Plans and all other kids of good stuff from PBS – good quality material and all free.

Grades K – 12

Tags: Science

<https://www.sciencebuddies.org/stem-activities>

A collection of quick and relatively simple experiments which are well suited to the home environment.

Grades K – 8

Tags: Science; Family Specific

<http://www.sciencekids.co.nz/experiments.html>

A well curated collection of science activities and experiments using simple materials.

Grades K – 8

Tags: Science; Family Specific

<http://Code.org>

A learning platform for both students and teachers, with courses, videos, projects, and a weekly webcast.

Grades K-12

Tags: Coding

<http://Python.org>

An easily downloadable coding program with student tutorials.

Grades 6-12

Tags: Coding

<https://blog.learningresources.com/5-screen-free-coding-activities-kids/>

Two screen free coding activities families can incorporate into their child’s play time.

Grades K-2

Tags: Coding, Family Specific

<https://www.atlasmission.com/blog/7-super-fun-screen-free-kindergarten-coding-games/>

A compilation of screen free coding and problem solving games to play as a family.

Grades K-2

Tags: Coding, Family-Specific

Atlas Mission (APP)

An app that combines art, play, and literacy in a digital world.

Grades K-2

Tags: Coding, The Arts

<http://kidscodejeunesse.org/>

Contains full lesson plans for teachers as well as online code club sessions.

Grades 3-8

Tags: Coding

Code-a-Pillar (by Fisher Price) (APP)

This app allows students to practice both computational thinking and basic math skills without purchasing a Code-a-Pillar.

Grades K-2

Tags: Coding

<https://carrefour-education.qc.ca/dossiers/la_programmation_et_le_developpement_de_la_pensee_informatique/codage_programmation_et>

Information about robotics and programming teaching strategies with suggestions of tech to use as tools to teach competencies like computational thinking.

Informations sur la robotique, la programmation et sur comment l’enseigner avec plusieurs suggestions de pièces technologiques (robots) pour apprendre des compétences comme la pensée computationnelle.

Grades: K-12

Tags: Coding

<https://kidscodejeunesse.org/fr/>

Virtual coding club, formation for teachers using microbit and activities parents can do with their children covers screen free coding, scratch, HTML, python, microbit and artbit.

Club de codage virtuel, formations pour les enseignants avec microbit ainsi que tout plein d’activités que les parents peuvent faire avec leurs enfants en utilisant le codage sans écrans, scratch, HTML, Python, microbit et artbit.

Grades 3-12

Tags: Coding

<http://rire.ctreq.qc.ca/>

Great bank of articles, reports, activity ideas and more (not just about coding, this is a very general ressource)

Bonne banque d’articles, dossiers et rubriques sur l’enseignement, des idées d’activités scientifiques et bien plus.

Grades 3-12

Tags: Coding; Science; Well-being

<https://csunplugged.org/en/>

<http://csunplugged.mines.edu/resources.html>

Screen free coding activities

Activités de codage sans écrans

Grades k-8

Tags: Coding

<https://creativitycatapult.org/>

A collection of hands-on, low cost, STEM and literacy activities out of the Center for Childhood Creativity.

Grades K - 8

Tags: Science, The Arts

<https://www.generationgenius.com/>

One month free trial gives full access to complete lesson plans with videos and activities that can be shared with students based on Canadian science curriculum.

Grades K - 8

Tags: Science

<https://www.exploratorium.edu/education/teaching-resources>

An extensive collection of educational media and hands-on activities.

Grades: K - 8

Tags: Science, Design and Build

<https://www.asc-csa.gc.ca/eng/resources-young/junior-astronauts/application/activities>

A variety of space themed content that is now publicly available and gives students an opportunity to win a trip to space camp.

Grades: K - 10

Tags: Science, Family Specific, Well-Being

<https://mathathome.org/nctm-standards-map/>

Early math activities organized by outcomes laid out by the US National Council for Teachers of Mathematics.

Grades: K - 2

Tags: Science, Family Specific

<https://www.centredessciencesdemontreal.com/jeux-experiences/sciencexpress/>

Straightforward experiment and design activities available in both languages.

Grades: 3 - 10

Tags: Science, Design and Build

<https://www.nasa.gov/kidsclub/index.html>

Space themed activities, games, puzzles and articles.

Grades K-5

Tags: Science

<https://spaceplace.nasa.gov/>

Space related crafts, activities, games and informations.

Grades K-5

Tags: Science

<https://www.lesdebrouillards.com/>

Teacher resources, experiments, activities, crafts etc. they are a popular science magazine too.

Resources expériences scientifiques, activités et bricolages etc. Les Débrouillards est aussi un magazine de vulgarisation scientifique.

Grades 3-8

Tags: Science

<https://espacepourlavie.ca/jeunes-et-enseignants>

Activities and experiments to do in class or at home from the organism that manages the planetarium, botanical garden, biodome and insectarium in Montréal.

Activités et expériences à faire en classe ou à la maison par l’organisme qui gère le planétarium, le jardin botanique, le biodôme, et l’insectarium de Montréal.

Grades K-12

Tags: Science

<https://www.espace-sciences.org/juniors>

Experiments, questions answered, and games.

Expériences, réponses à plusieurs questions et jeux.

Grades K-5

Tags: Science

<https://www.educatout.com/index.html>

Science experiments, but also has lesson plans (different subjects), free printables etc.

Expériences scientifiques, mais aussi plusieurs plans de leçon (divers sujets), documents à imprimer gratuitement etc.

Grades pre K-3

Tags: Science

<https://kidiscience.cafe-sciences.org/>

Articles by subjects (chemistry, biology etc) and experiment ideas.

Rubriques séparées par sujets (chimie, biologie etc.) ainsi que des suggestions et idées d’expériences.

Grades 3-8

Tags: Science

<https://www.canada.ca/fr/services/science/ressourcespedagogiques.html>

Activity booklet, activity ideas for parents, lesson plans, ask a scientist and informative videos .

Livret d’activités, idées d’activités pour les parents, plans de leçons, Demandez-le à un scientifique et vidéos éducatifs.

Grades K-12

Tags: Science

<https://www.usherbrooke.ca/crp/ressources/ressources-electroniques-par-discipline/>

Online resources separated by subject (math, science, arts, coding, reading, writing etc.).

Ressources en ligne séparées par sujets (math, sciences, arts, codage, lecture, écriture etc.).

Grades K-8

Tags: Science; Coding

<http://www.eclairsdesciences.qc.ca/>

Various teaching resources, scientific resources, and activities/experiments (can choose subject and difficulty level/grade).

Ressources pédagogiques variées, ressources scientifiques ainsi que plusieurs activités et expériences (possibilité de choisir la matière et le niveau scolaire/difficulté).

Grades K-8

Tags: Science

<http://www.scienceenjeu.com/index.php>

<http://www.scienceenjeu.com/profs/pdf/SCIENCEENJEU-Ressources-pedagogiques.pdf>

Online games with a PDF that lists the games, links to the curriculum with a description of the games.

Site de jeux en ligne avec un document PDF qui fournit la liste des jeux, les descriptions et les liens avec le curriculum.

Grade K-12

Tags: Science

<https://www.sciencepresse.qc.ca/education-aux-medias/2019/03/04/ressources-pedagogiques>

Activity sheets and lesson plans on various subjects including science.

Feuilles d’activités et plans de leçons sur une variété de sujets, incluant les sciences.

Grades 6-12

Tags: Science; Well-being

<https://www.centredessciencesontario.ca/School/Resources/>

A video series available on YouTube on learning through play and inquiry-based learning with lesson plans aligned with the curriculum (Ontario).

Une série de vidéos disponibles sur youtube sur l’apprentissage par le jeu et l’apprentissage par l’enquête avec des plans de leçons en lien avec le curriculum (Ontario)

Grades K-3

Tags: Science