









High School Sciences: Supplemental Resources & Supports





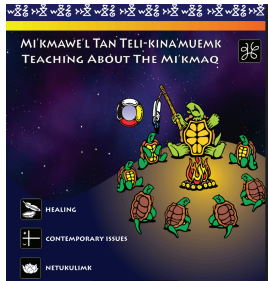

Please note that this document is a work in progress. Some links may not work after it has been shared with teachers. Some linked sites may provide limited free access to resources. A [bias evaluation](#) should be completed for any material used with your students. As well, there is a digital resource assessment (DRA) process for apps/websites that should be reviewed. [See the FAQ](#) on the TILT site for further details. If you have a resource to share, please contact Melina McNeil (mcneilm@gnsps.ca) so that it can be added to this growing list.

On-line Resource Link (Click on Image or Title)	Brief Description	Subject Area(s) 10-12					
		Sci 10	Chem 11-12	Physics 11-12	Bio 11-12	Ge o 12	Other
	PhET provides fun, free, interactive, research-based science and mathematics simulations.	x	x	x	x	x	x
	American Chemistry Society provides a list of various websites that have lab simulations and other animations to support virtual learning.	x	x				
	The Physics Classroom offers physics interactives, simulations, and tutorials as well as question banks.	x		x			
	Government of Canada: <i>Science Education Resources</i> provides activities, lesson plans, videos and more to help youth learn about science and technology.	x	x	x	x	x	x
	Here you'll find a wealth of resources and information aimed at helping educators bring genetics, bioscience and health alive in the classroom. A companion to the popular Learn.Genetics website, Teach.Genetics offers additional tools and				x		






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	resources to support your curriculum, all free of charge.						
		Sci 10	Chem 11-1 2	Phy s 11-1 2	Bio 11-1 2	Ge o 12	Oth er
	Various Interactive Labs for students to access.				x		
	BioCoach activities allow students to visualize and apply their understanding of biological concepts. During these practice activities, students manipulate graphs, complete biological puzzles, and answer questions. LabBench provides students with pre- and post-lab reviews. Animations and interactive questions connect laboratory procedures to biological principles. Designed for advanced students, these activities correspond to the AP® Lab Manual and include sections on key concepts, experiment design, analysis of results, as well as a lab quiz.				x		
	Interactive Periodic table which includes properties, electron configurations, isotopes and more. Suggested lesson plans and links to demo videos are included.	x	x				
EECD list of Geology	Includes links to NS					x	x




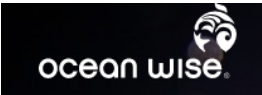


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Resources	resources.						
	Some free animations, videos and simulations	x	x				
	Access to various resources for teachers including lesson plans, videos and much more!	x			x	x	x
		Sci 10	Chem 11-1 2	Phy s 11-1 2	Bio 11-1 2	Ge o 12	Oth er
	The Sustainable Blue Economy - interactive resource for kids, families and educators	x			x		x
	Activities, Exhibits and Videos	x			x	x	x
	Provincial Resource with a variety of links and suggestions for activities, especially related to the concept of Netukulimk.	x				x	x
	Great resource of virtual field trips/discussions with scientists. The High School Version has videos saved for anytime access.	x	x	x	x	x	x


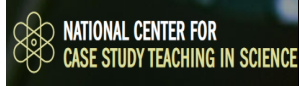
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	<p>On-line resources including videos, lesson plans, links, etc. It is also searchable based on subject/grade level and concept.</p>	x	x	x	x	x	x
<p>World Atlas Science</p> 	<p>Science articles linked to various parts of the world.</p>	x	x	x	x	x	x
	<p>This website offers videos related to careers and meant to provide role models that could be used for all genders.</p>	x	x	x	x	x	x
	<p>A nine-part science-focused educational curriculum series, interweaves Indigenous science with Western science to advance knowledge, using the concept of Etuaptmunk or Two-Eyed Seeing. Throughout the series you'll discover amazing fields of science, and learn to connect the dots to Indigenous knowledge and hands-on activities. Access the digital copy easily by completing a form.</p>	x	x	x	x	x	x
	<p>Open educational resources that are searchable by subject area and grade level.</p>	x	x	x	x	x	x
<p>Biology Junction</p>	<p>Virtual Labs specific to</p>	x			x		

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	Advanced Placement						
	Free Access to Science Lab Activities That Support Distance Learning	x	x	x	x	x	x
	Browse online educational programs by museum name or by type. Explore new spaces through virtual tours, or visit digital exhibitions through Ingenium's partnership with Google Arts & Culture.	x			x	x	x
	Includes videos, kits, programs, lesson plans and other resources designed to support educators and develop an understanding of how humans impact the ocean and how the ocean influences us.	x			x	x	x
	Ocean School provides resources for teachers to use with their students. Compatible with Google Classroom, there are videos, animations, and activities that can be shared with your students.	x	x	x	x	x	x
	"We've combed through Ocean School to put together a few weeks of our favourite materials. There's an educational video and a student activity for each week day." Teachers could	x			x	x	x

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	use this material with their students. Sign in is not required.						
	This is a free open-access textbook available to anyone. It is meant as an overview of chemistry.	x	x				
<u>Physics Simulations</u>	A free collection of physics simulations with changeable parameters and real-time animation.	x		x			
<u>POD Online Science Simulations and Laboratory Resources</u>	An extensive list of virtual science simulations and other lab resources	x	x	x	x	x	x
	This site is a repository of case studies for teaching science. Access to the case studies are free. In order to access the answer keys you need to pay a \$25 fee.	x	x	x	x	x	x