

STEM-AT-HOME BINGO CARD

Instructions & Resources

STEM stands for the subjects Science, Technology, Engineering and Math. Studying and working in STEM offers many opportunities so the BINGO card takes a different approach to the STEM acronym. Each column on the STEM BINGO card represents a different aspect of STEM: **S**ocialize, **T**ravel, **E**ntertain, **M**ake.

SCIENCE	TECHNOLOGY	ENGINEERING	MATH
Socialize Meet great people in STEM	Travel STEM takes you cool places	Entertain Find the fun in STEM	Make STEM needs your creativity

Each BINGO card focuses on a topic within the STEM subjects. The resources listed below include videos, activities and readings to help your child/student complete the BINGO card. The resources are divided by the column themes and some crossover occurs. Either have your student answer 4 boxes in a row, or try to complete as many boxes as possible.

EARTH SCIENCE RESOURCES

Socialize

Career Profiles with Natalie Swanson and Jason Carignan

<https://letstalkscience.ca/careers/natalie-swanson>
<https://letstalkscience.ca/careers/jason-carignan-video> (3 mins)

Scientist Chat with Dr. Bhairavi Shankar
<https://youtu.be/fqDJ8d-JAz0> (45 minutes)

Travel

Natural Resources Canada - Earthquake Tracker
<https://earthquakescanada.nrcan.gc.ca/index-en.php>

Google Earth
<https://www.google.com/earth/> (Click "Launch Earth" and use the search function)

Entertain

Pacific Museum of Earth Interactive Tour
https://pme.ubc.ca/visit/virtual-tour/?fbclid=IwAR00DU0Y3klzdun9Ja6FusXGVOOPCxOpTIWgfuPMFJ3uLfsQf_YAoOp8aWg

The Earth - Crash Course Astronomy
<https://youtu.be/w-9gDALvMF4> (10 mins)

Make

NASA - Create a Moon-like Crater
<https://www.jpl.nasa.gov/edu/teach/activity/make-a-crater/>

Mining Matters - Eggs-periment with Vinegar
 file:///C:/Users/L1205~1.PAU/AppData/Local/Temp/educators---junior---activity---eggsperiments-with-vinegar.pdf OR access the pdf here:
<https://miningmatters.ca/resources/education/activities-and-lesson-plans>

ANSWERS - Earth Science

S	T	E	M
<p>When did Natalie take her first Geology course?</p> <p>1st year University - by fluke!</p>	<p>Where did the closest earthquake to your home occur in the past 30 days?</p> <p>(look at 30 Day Map on NRCAN website to determine the closest to home)</p>	<p>In the virtual museum, what is the Dinosaur's name?</p> <p>George</p>	<p>What height caused the biggest crater to be formed?</p> <p>Open answer - the higher the bigger</p>
<p>Does Bhairavi study the geology of our Earth?</p> <p>No - she studies the geology of other planets!</p>	<p>How long is the San Andreas Fault Line?</p> <p>1,200 Km (search for San Andreas Fault in Google Earth)</p>	<p>What is the scientific name for "fool's gold"?</p> <p>Pyrite</p>	<p>How much time did it take for bubbles of gas to form after adding egg shells to vinegar?</p> <p>Open answer</p>
<p>What does Jason use at work for survey land?</p> <p>Drones (or UAVs)</p>	<p>Where is the Minchinmávida Volcano?</p> <p>Chile, and it is a Stratovolcano (has alternating layers of lava and ash)</p>	<p>How hot is the Earth's core?</p> <p>5,500 °C</p>	<p>What did you use to track the growth of crystals in your egg + vinegar mixture?</p> <p>Open answer (journal, photos, drawings, etc.)</p>
<p>Name two job titles that Bhairavi mentions related to geology:</p> <p>Geophysicist Seismologist Geodesist Geologists Geophysical modeller Geodynamist Researcher</p>	<p>Of the most recent reports, where was the biggest earthquake in Canada? (can you name the latitude and longitude of the location?)</p> <p>See NRCAN "Recent Significant Earthquake Reports" with the highest M=__ value</p>	<p>During an Aurora in the night sky, what element glows red and green?</p> <p>Oxygen</p>	<p>What does the Moon crater look like if you throw your "asteroid" sideways onto the "moon"?</p> <p>Open Answer</p>

EXTRA RESOURCES

Flyover County App: <https://flyovercountry.io/> (for iPhone and Android)