

STEAM Activities for Home Based Learning

Below is a list of learning ideas that families can do at home together or students can do themselves. This list has been compiled by myself using many other resources (some are linked below) as inspiration. I will continue to add more resources to give families further support for at home learning.

Activities STEAM - Science, Technology, Engineering, Arts & Maths
LEGO cars challenge <ul style="list-style-type: none">• Create your own LEGO car• Create a downhill course.• Time each car going down the course.• Make sure to keep track of your times by using a spreadsheet such as Google Sheets.• Use the data to modify and make improvements to your car
Paper Airplanes <ul style="list-style-type: none">• Design the best flying and looking paper airplane.• Find a space to fly your planes and see whose goes furthest.
Playdoh <ul style="list-style-type: none">• Using playdoh make your own characters and create an interesting comic! Use Google Slides comic template and your device to take images.
Rube Goldberg Machine <ul style="list-style-type: none">• Create your own Rube Goldberg machine using household items, a marble or ball.• Play the Rube Goldberg machine for inspiration• http://www.engineering.com/gamespuzzles/dynamicsystems.aspx
Ninja Warrior <ul style="list-style-type: none">• Make your own Ninja Warrior Course in your backyard.• Using the timer on your device to track your attempts, and chart your times on a spreadsheet such as Google Sheets.
Treasure Hunt <ul style="list-style-type: none">• Create your own treasure hunt for your kids or have them create their own to share with the family• https://www.thespruce.com/indoor-treasure-hunt-for-children-1695332
Garden decorations <ul style="list-style-type: none">• Weave wool and sticks etc to create your own garden ornaments.• Using a glue stick and paper, create your own works of art out of the natural materials you find around your garden.
House plan <ul style="list-style-type: none">• Use a measuring tape to measure out your house and create a 3D plan using tinkercad (sign in with your college gmail account). Create your dream bedroom using tinkercad.
Minecraft education <ul style="list-style-type: none">• Lots of great worlds to explore and create.
Indoor Forte

- Use sheets, blankets and furniture to create a fabulous forte. Make sure everyone has their own space as well as common areas.

Shoelaces

- Design your own method of shoe tying

Family Logo

- Draw a family logo to represent your family members, family culture and ethics.

Coding

- Use www.hourofcode.com to learn how to code games and apps. www.makecode.org is also a great way to learn how to make your own games.

Song writing

- Write and produce your own music using either garage band or www.bandlab.com. Create an account using your college gmail account. *Please note that bandlab is appropriate for students 12+

Crosswords etc.

- Download crosswords and sudoku of different abilities for the family to do individually or together. Make your own crosswords using online tools or paper.

3D shapes

- Use play doh and paper tubes to create 3D shapes. Either known or unknown new shapes.

Indoor sports

- Use a ball of socks and a shoe as a bat and create your own version of cricket, baseball or tennis!

Finding Nemo

- Watch the movie and then choose an animal to investigate. Create a theme song, draw a picture, make a diorama, a minecraft world for the animal or create a super version of the animal!!!

Letter writing

- Write a letter to your grandparents or someone else in your community. Tell them what you've been up to and what are your favourite activities to do at home. Scan it and then email it to them!

Sustainability

- Make your own compost or worm farm using old buckets. Use your worm wee for your veggie garden or flowers! Keep track of how long it takes for different fruits and vegetables to decompose/ worms favourite foods.

Origami

- Try making a crane or other animals using YouTube tutorials.

Other Activities to do at Home

Read at home every day	<ul style="list-style-type: none">● Picture books● Comics● Newspapers● Books you loved as a kid● Audio books● Podcasts -<ul style="list-style-type: none">○ How stuff Works,○ Brains On!,○ Fierce Girls,○ Peace Out,○ Maths Puzzles○ The Howie Games - Stories of sport stars (Episode 85 may not be appropriate for primary aged students.)
Board games	<ul style="list-style-type: none">● Dust off your old board games.● Card Games● Make your own games or modify
Play outside	<ul style="list-style-type: none">● Basketball in the front yard● Make an obstacle course● Using chalk, make your own hopscotch or number line on the concrete. Use a dice to add and subtract up and down the number line.

Useful Websites

Address	Information	Subject
www.fuse.education.vic.gov.au	FUSE is a DET resource of open websites and lessons for Victorian Students.	All
www.switcheroozoo.com	Watch, listen and play games to learn all about amazing animals	Literacy and Science
www.funbrain.com	Games with practicing maths and reading skills (note this is an American website)	Numeracy and Literacy
www.kidsnationalgeographic.com	Learn about geography and fascinating animals	Geography
www.seussville.com	Read, play games and hang out with Dr Seuss and his friends	Literacy
www.abcya.com	Maths and reading skills whilst playing games	Literacy and Numeracy
www.storylineonline.net	Have some of your favourite stories read to you by movie stars.	Literacy
https://neal.fun	Interactive infographics and a bit of fun!!	Science, Humanities Numeracy and Literacy.
https://www.zoo.org.au/animal-ho-use/	Zoos Victoria has set up live streaming of their animals. Lots of fun to watch. Check out other Zoos for their cameras such as Georgia Aquarium Piranhas! https://www.georgiaaquarium.org/webcam/piranha-cam/	Science

Whilst many of these activity ideas are my own, I have also been inspired by others such as www.ayearofmanyfirsts.blogspot.com and Home Schooling Network America.