

STEM@CGI AT HOME

STEM-based activities for kids that can be done at home

We are pleased to announce the launch of STEM@CGI at Home – a program that will feature activity packets with practical STEM activities for children (of all ages).

We appreciate the difficulties parents and students are facing as schools are closed and many parents are working from home due to COVID-19. To help with this, we are going to be releasing weekly STEM-based activities that you can do at home with your children.

Activities will encompass all aspects of STEM, including coding, environmental sustainability, robotics and opportunities to teach our children all about CGI!

Activity - The Boat Race



In this activity, you will learn how to make a racing game. The player will use the mouse to navigate a boat to an island without bumping into obstacles.

Recommended ages: 8-14 (we will have activities for younger children in coming weeks).

You can [access this activity here](#).



What you will need

A PC/tablet capable of running Scratch 3 and [Scratch 3 software](#). Please note you may need to download the software.



What you will learn

- How to use operators to compare numbers in Scratch
- How to add code to detect when a sprite is touching a colour in Scratch
- How to use a variable to record the time in Scratch

Bonus activity – Design Your Own STEM Superhero!

We know that STEM advances our lives and has formed the basis of hundreds of professions all over the world for thousands of years. However, which area of STEM are you most interested in? Which area do you think could most use a STEM Superhero?

Your task is to design and draw/build your own STEM Superhero. Your hero can be related to any area of STEM and should have their own designated super power! Designs can be hand-drawn, drawn electronically or created as a model, it's up to you. Just be sure to let us know what powers you have chosen! The following factors should be considered in design:

- What superpower will your hero have?
- How will they help in the world of STEM?
- What will your hero look like? Make sure that your hero stands out!
- Be creative and think outside the box!



Ask your Parent/Guardian to upload to social media using #STEMfromHome and #ExperienceCGI, remember to tag us!

Additional bonus activities

The activities are aimed at students aged 8-14 but everyone can get involved!

Falling Stars

Make a platform game with your own characters, levels and powers.

Beat the Goalie

In this project you'll learn how to create a two-player soccer game in which you have to score as many goals as you can in 30 seconds.

Bird Watch Website 1.0

Learn how to code your first website using HTML/CSS.

Turtle Snowflakes

Create a beautiful landscape of snowflakes using Python Turtle. This is great fun and a great way to start learning how to code with Python.

Thanks to our friends at Raspberry Pi for providing the coding and robotics activities in this packet.

For more information or additional support with STEM activities when working remotely, please contact us here.

© 2020 CGI Inc.