

Hour of Code Resources

The Hour of Code is one of my favorite weeks of the year. It is designed to introduce Computer Science concepts to people of ANY age. Each year I create a list of resources for students, teachers and parents. The list might also include resources that are still active from the previous year, as well as new and improved resources. Please note that some of the resources might be subscription based and/or have in-app purchasing. Most of these have some “free” component for the Hour of Code that will give you an opportunity to try before you buy. PLEASE remind students they should not be signing up for any service and/or sharing their personal/private information while taking part in code.org activities.



The Hour of Code 2024

Find activities that span a variety of topics and grade levels.

<https://code.org/learn>

You can search by various filters.

[Minecraft HOC Activities](#) (From previous years)

code.org

All K-6 students at CSE have access to grade-level specific [code.org](#) lessons & units. Due to short weeks & snow days, some classes didn't have a chance to login with me and might need a little help. The directions are on all of their login cards.

Tynker

[Hour of Code 2024](#). Play fun coding games. Build AI-powered projects.

CSEDWeek

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

Computer Science Education Week is an annual call to action to inspire K-12 students to learn computer science, advocate for equity, and celebrate the contributions of students, teachers, and partners to the field.

What is Computer Science?

https://www.youtube.com/watch?v=1lpSfRi_D9Q

Hear what the folks at Sphero have to say!

Alice (6th & Up)

<http://www.alice.org/get-alice/>

Alice is a FREE innovative block-based programming environment that makes it easy to create animations, build interactive narratives, or program simple games in 3D.

AllCanCode - Run Marco (Younger Students)

<https://www.allcancode.com/hourofcode>

App Inventor (3rd+)

<http://appinventor.mit.edu/explore/hour-of-code.html>

App Inventor is a free, cloud-based service that allows you to make your own mobile apps using a blocks based programming language.

App Lab (6th+)

<https://code.org/educate/applab>

App Lab is a programming environment where you can make simple apps.

Apple Store - Click on “Coding & Apps” in the menu to learn about their free workshops.

<http://www.apple.com/retail/code/>

Bitsbox

<https://bitsbox.com/code.html>

Interactive “app” building.

Blockly

<https://blockly-games.appspot.com/>

A fun collection of games to help you develop your coding skills.

BotLogic (Great for Kindergarten and youngers)

<http://botlogic.us/#sthash.CjnGQ4Bz.ZFYVAX25.dpbs>

Click on “Play Game Now.” If you are ready to play, you can first click on the level you would like to skip to and then click on “Start Game.”

BrainPop Hour of Code - Code Across the Curriculum

<https://go.brainpop.com/hourofcode>

Creative Coding with BrainPOP - you will need to scroll down just a little ways to see all the activities.

Chrome Experiments

<https://experiments.withgoogle.com/collection/chrome>

Chrome Experiments is a showcase of work by coders who are pushing the boundaries of web technology, creating beautiful, unique web experiences.

Code Avenger (ages 5-16)

<https://www.codeavengers.com/jr>

Code Combat

<https://codecombat.com/>

You will need to click on “I’m a Student” and that you don’t have a code, but still want to play.

Code Monster (6th & Up)

<http://www.crunchzilla.com/code-monster>

Fun way to work with HTML.

Code Monkey (3-6)

https://www.codemonkey.com/hour-of-code?utm_source=mc&utm_medium=email&utm_campaign=k_hrofed

New resources for this year.

<https://www.playcodemonkey.com/challenges/0>

Watch the video and get started on your adventure.

Code Pen (6th & Up)

<http://codepen.io/#>

“The best place to build, test, and discover front-end code.” An account does need to be created for this site, so check with your parents!

Code with the Grinch

https://www.grinchhourofcode.com/game.html?fbclid=IwAR0-HXPvaxkWIFxkzZYD1ngZs0x3H1_pzKaPNnscTNMQUaIoDYeVIpUM-3I

An easy & basic Hour of Code activity.

Code Spark Academy

<https://codespark.com/hour-of-code/>

Codesters (6th & Up)

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

Compute It

<http://compute-it.toxicode.fr/>

A flash based game that challenges students to over 50 levels of coding puzzles. Using only your arrow keys, you have to solve each puzzle by completing the algorithm. Through this game, you will learn loops, conditionals, and functions.

Disney Moana & The Hour of Code

<http://partners.disney.com/hour-of-code>

Code with Moana and other Disney characters.

Gamestar Mechanic

<http://gamestarmechanic.com/>

“Gamestar Mechanic uses **fun, game-based quests and courses** to help you learn game design and make your own video games!” An account does need to be created for this site, so check with your parents!

Google CS First - Coding a Super Hero

<https://csfirst.withgoogle.com/c/cs-first/en/code-your-hero/overview.html>

(Students can use their Google login and will need to write down their username & password.)

Google Logo - Create your own!

<https://csfirst.withgoogle.com/c/cs-first/en/create-your-own-google-logo/create-your-own-google-logo/create-your-own-google-logo.html>

(students can use their Google login and will need to write down their username & password.)

Hour of Code Studio 1

<http://studio.code.org/hoc/1>

Khan Academy Computer Science

<https://www.khanacademy.org/computing/computer-programming>

Learn the basics, starting with Intro to programming.

Kahn Academy Hour of Code

<https://www.khanacademy.org/computing/hour-of-code/>

Try an Hour of Code with Kahn Academy.

Kodable (Ages 5+)

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

The first 30 levels are free. Students don't need to know how to read in order to program using this game.

Kodu (Ages 8+)

<http://www.kodugamelab.com/about/>

A programming tool that can be easily used on a PC or Xbox to create a simple game.

Looking Glass (Ages 10+)

<https://lookingglass.wustl.edu/>

Looking Glass is a programming environment for ages 10 and up. With Looking Glass, you can create and share animated stories, simple games, and even virtual pets.

Made with Code by Google (girl focused)

<https://www.madewithcode.com/projects/>

Minecraft

<https://education.minecraft.net/>

New Hour of Code with Minecraft. Just click on “Start Coding”.

Monster Coding (K-2 & 3-6)

http://monstercoding.com/#hour_of_code

Click on your language of choice. You can look through the resources that they have, but when you are ready to code, click on the blue, “Launch App” button in the top right.

Play Lab - code.org (3-6)

<https://code.org/playlab>

Choose your Play Lab theme and you can have everything translated for you if needed.

Python (6th & Up)

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

“Python is a programming language that lets you work quickly and integrate systems more effectively.”

Robot Turtles (Younger Students)

<http://www.robotturtles.com/>

A fun board game that teaches children the basics of programming without having to use any technology. (We have this game in the lab and it’s great.) They also have an interactive eBook that you can also purchase.

Scratch

You DO NOT have to have an account to create, but without an account, you will NOT be able to save your work. Students in 3rd-6th did not create accounts this year in the Innovation Lab.

1. Find 9 different activities that all have a Self-Guided [Tutorial](#)
2. Main Scratch site - [HERE](#)
3. A [video tutorial](#) for teachers, parents or students - learn how to create a Speed Racer game.

Science Buddies

<https://www.sciencebuddies.org/blog/computer-science-coding-projects>

Planning an hour of code with students for Computer Science Education Week? Try these projects and activities to help students explore computer coding now and after! Our [15+ Coding Activities for Beginners and Beyond](#) features programming activities for students at all levels.

Snap!

<http://byob.berkeley.edu/>

“Snap! is a broadly inviting programming language for kids and adults that’s also a platform for serious study of computer science.”

Spacechem (Ages 12+)

<http://www.zachtronics.com/spacechem/>

A mix of chemistry, reading, and programming for ages 12 and up. As students read the 10,000-word novelette, they have to solve puzzles by assembling molecules.

Shpero

https://sphero.com/blogs/news/hour-of-code-activities-2022?utm_source=ActiveCampaign&utm_medium=email&utm_content=CSEdWeek+%26+Hour+of+Code+With+Sphero&utm_campaign=CSEdWeek+2022

This year, they created **FOUR** new Hour of Code activities that you can try with students, or kids can try with their robots and parents at home.

Teach Your Kids to Code: 6 Beginner's Resources for Parents

<https://www.edutopia.org/blog/teach-kids-coding-resources-parents-matt-davis>

This is an older post (published in 2014), but still offers some good resources.

Tinkercad - 3D Modeling/Printing

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

Tinkercad is a free, easy-to-use app for 3D design, electronics, and coding.

Turkey Trot (Tynker)

<https://www.tynker.com/ide/?p=5824b99aaf9231f03d8b457a>

Turkey Jump (Tynker)

<https://www.tynker.com/ide/?p=56536eebaf9231da588b459e>

Tynker (Great for ALL grade levels)

<https://www.tynker.com/hour-of-code/>

Look through the different coding projects. Keep an eye on the grade level recommendations. When you've made your choice, click on the puzzle. Some will take you straight to the activity, for others you might need to read the directions and then click "begin" or "play".

APPS FOR THE AMAZON DEVICES

[lightbot](#)- Free

[ScratchJr](#) - Free

[Run Marco!](#) - Free

APPS FOR THE CHROMEBOOKS

[lightbot](#)- Free

[Run Marco!](#) - Free

APPS FOR THE iPad

[Bee-Bot](#) - Free

[Cargo-Bot](#) - Free

[Daisy the Dinosaur](#) - Free

[Hopscotch](#) - Free (offers in-app purchases)

[Kodable](#) - Free (offers in-app purchases)

[lightbot](#) - \$3 but does offer free HOC resources

[Run Marco!](#) - Free

[Scratch Jr.](#) - Free

[Swift Playground](#) - Free