NOMESCHOOL FRIENDS February Resource Guide



THE IMPORTANCE OF CODING

Welcome to the world of coding! This month we will examine all things written in code. From the perfect way to set up instructions to clearly write code, to flow coding, and beyond! We will be doing lots of hands-on games and activities to simulate coding, and take a look at some actual coding applications, such as Scratch.

On the following pages, I have listed online resources that the entire family can check out to really dive into the exciting subject of coding.



HOMESCHOOL FRIENDS TAKES PLACE EVERY THURSDAY @ 2PM VIA ZOOM!

Please email katie.hall@nashville.gov to register.

COMING UP!

FEBRUARY 4 GAME DAY

The perfect day for newbies! We are going to play games and do a show-and-tell so everyone can get to know each other.

FEBRUARY 11 WHAT IS CODING?

During this session, we will talk about the most basic of coding concepts, and look at the importance of creating clear instructions. We will do an activity to supplement this subject.

FEBRUARY 18 CODING LANGUAGE

For this session, we will take a look at how language plays an important role in coding and various coding languages. We will do a coding game involving emojis

FEBRUARY 25 THE FUTURE OF CODING

During our final session, we will talk about the future of programming and possible careers in coding. We will continue to play games to understand the subject.



CODING WEBSITES FOR KIDS AND PARENTS

- <u>Code.org</u>- This nonprofit foundation's website is an excellent starting point for coding novices. It shares plenty of useful online resources, apps, and even local schools that teach coding. Downloadable content for those with questionable internet.
- <u>Khan Academy</u>- Provides basic programming tutorials for kids. Also has links to videos and coding activities.
- <u>Glitch</u>- This is a collaborate space for making apps. The app is not necessarily geared for kids, and it may be more practical for tweens who are more familiar with coding basics.
- <u>Code for Life</u>- This website is geared for educators, and provides easy lessons for students interested in coding on various levels.
- <u>Girls Who Code</u>- Under Programs, take a look at the Code at Home section. This section has some fun activities for the entire family.

Coding is the language of the future, and every girl should learn it. As I've learned from watching girls grow and learn in our classrooms, coding is fun, collaborative and creative.

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Reshma Saujani, Founder of Girls Who Code

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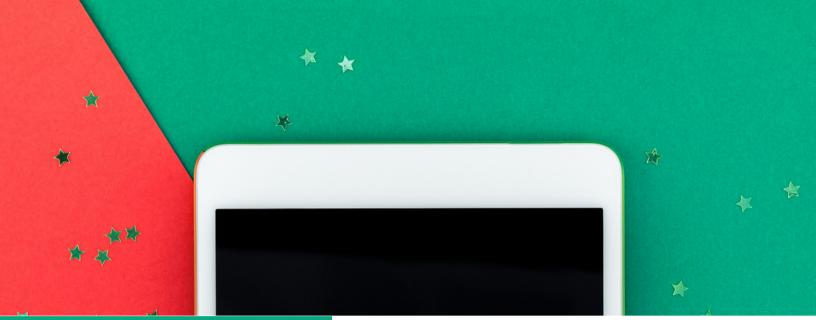




VIDEOS ON THE BASICS OF CODING

- <u>zakUak</u>- This cute kid explains how to use Scratch. Made for beginners, it is easy to follow along with and learn all about how to make games.
- <u>What are Computer Programs</u>- What are computer programs and why are they important? What does code do? Watch this short video to learn the basics of computer science with Kodable.
- Invention of the Computer Programming Language Learn all about the Invention Of Computer Programming Language from Dr. Binocs himself.
- <u>Computer Science Basics: Sequences, Selections, and Loops</u>- We use computers every day, but how often do we stop and think, "How do they do what they do?" This video series explains some of the core concepts behind computer science.
- <u>A 15-year-old has taught dozens of other kids how to code in quarantine</u>- An inspirational story to get your kiddos excited to learn about coding.
- Youtube Channels to Teach Kids Coding- This is a list of selected channels focusing on coding.



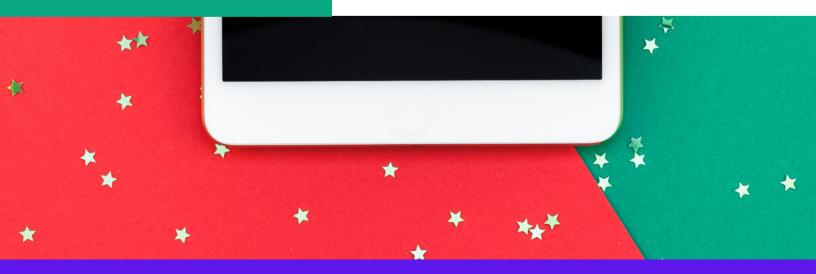


Simplicity is the prerequisite for reliability.

Edsger Dijkstr, Dutch computer science pioneer

CODING GAMES

- <u>Blockly</u>- Blockly Games is a series of educational games that teach programming. It is designed for children who have not had prior experience with computer programming. By the end of these games, players are ready to use conventional text-based languages.
- <u>**Combat Code</u>** Introduces kids to basic code languages. More advanced options require a subscription.</u>
- <u>Scratch</u>- Using code, kids can create their own stories, games and animation. This popular site created by MIT is a great free resource.
- <u>Code Monster</u>- This is a super simple game for beginners. It is meant for preteens, but can be used by younger children with help.
- <u>mBlock</u>- Based on Scratch and its "building block" approach to code, mBlock offers a step up for older kids who want to learn Python, AI, and other skills, too.







SPECIAL ANNOUNCEMENTS

FIRST MEETING OF THE MONTH

In order for the kiddos to bond, and to allow for new families to join and connect, I am designating the first day of every month all to play! This is a great way for the kids to really get to know one another and have fun.

I feel like this is particularly important right now because we are so cut off from one another. I hope everyone spreads the word about our first meeting and lets friends know this is the perfect time to check out Homeschool Friends.

CONNECT VIA FACEBOOK AND Instragram

If you are looking for ways to stay connected or to share this opportunity with friends, follow us on Facebook, Instagram and Twitter. For Instagram and Twitter you can look us up by searching **#nowatnpl**.

You can find us on Facebook at <u>@NPLMain</u>

BOOKLISTS

I created two book lists for this month. Check them out below and please let me know if you need assistance placing any items on hold.

- <u>Computer Science and Engineering for Kids</u>- This covers anything from robotics to basic computer knowledge. Great for kids who may be interesting in advancing technologies.
- Coding for Kids- This covers most coding languages and sets kids up for more intermediate skills in coding.

OTHER RESOURCES

Overdrive Kids is the kid -friendly version of the Overdrive app. There are tons of computer science and coding related fiction and nonfiction titles on there for kids. The adjustable settings and format make it easy for reading on most portable devices.

In order to access these titles, you must have a library card. If you are a Davidson County resident, and you don't have a library card, <u>signup easily online</u>. If you live out of county, please call your <u>nearest</u> <u>location</u> to inquire about a library card.