



How to...



SMART IDEA

Taking an interest in computer programming can help kids do better in other subjects.

Try your hand at coding

Explore the basics of computer programming with these steps and ideas.

If you're looking for an interesting new hobby, you might want to try coding (also known as computer programming). Coding is when you give a computer instructions to do something in a language it understands. "People use coding to make websites, video games, apps, and more," explains David Dodge of CodaKid, an online coding academy. Learning to code can be fun, spark your creativity, and challenge you to solve problems. Here's how coding works and how you can get started.

Why code?

Many experts believe that computer programming will be just as important as writing and math in the future. Computers—and products that rely on them, like robots and apps—are becoming a bigger part of our daily lives. Understanding how they work is key. Knowing how to code will be a useful skill to have throughout your life.

Get started

The first step is to understand basic coding concepts. The Hour of Code challenge is a good place to start. When you have an hour of free time, log onto hourofcode.com/us/learn. (Ask an adult's permission before logging onto any of the websites in this story.) Click to see options that use "block coding" on the

menu bar and then pick an activity that sounds fun. Block coding is a good way to learn basic concepts. You will learn to drag and drop blocks of computer instructions to create animated stories and games.

Go deeper

To go further with block-based coding, check out Scratch.MIT.com. This site offers fun activities that use a popular programming language called Scratch. For inspiration, you can browse through previous projects people have created on the site. If you want a more structured class, try Tynker.com.

It will teach you ways to use block-based coding with free activities, and it offers traditional online classes for a fee.

Learn a language

Once you're comfortable with block-based coding, you can make the jump to a text-based coding language. JavaScript and Python are two popular languages you may have heard of. Python is a good one to start with because it's easier to learn. Consider signing up for a class or a series of classes online. Ask an adult to help you look into well-respected websites like Udemy.com and Codakid.com. Both offer inexpensive class options that will teach you Python and give you the skills to create games, simple websites, and more.



Great moments in coding history

Coding has been around longer than you might think. Check out these top milestones.

1843 British mathematician Ada Lovelace writes the first program for a computing machine.



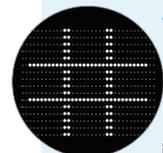
1946 The US military introduces the first electronic computer, called ENIAC. It filled a large room.



1947 Scientists report a "computer bug"—a moth trapped in their computer, causing it to not work. A bug is an error in a system, but this is the first time anyone used the word to describe a computer glitch.



1952 One of the first computer games, a version of Tic-Tac-Toe, is created in Great Britain.



1959 Grace Hopper, a mathematics professor and Navy veteran, develops one of the first modern computer languages, called COBOL.



1974-1977 The first personal computers for people to use at home become available to buy. Before this time, computers were mostly for scientists.