There is always someone worth learning for, even if it’s yourself!

~Kevin Little- educator~

Anybody can learn anything!
https://code.org

Kevin Little
CS Regional Coach
KLLittle@ed.sc.gov
What will you create?

Choose a tutorial

https://scratch.mit.edu/ideas

Getting Started

New to Scratch? Try the Getting Started tutorial.

Try it!
Profile of the South Carolina Graduate

**World Class Knowledge**
- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

**World Class Skills**
- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

**Life and Career Characteristics**
- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills
Scratch Review

Sprites
Functions
Events
Values
Conditions

Loops
Variable
Abstraction
Building from Scratch
**Table Setting Basics**

**TABLE MANNERS**
- Wash your hands before you eat.
- Keep your elbows off the table and sit up tall.
- Place your napkin in your lap.
- Wait for everyone to be served before eating.
- Food to mouth, not mouth to food.
- Chew with your mouth closed.
- Ask politely to be excused when you are done. Say please and thank you.

**Utensils**
- **plate**
- **fork**
- **knife**
- **spoon**
- **cup**
Make your own restaurant!

Food safety project

By Luke Burke
Use the arrows to rotate the object to face in the direction of the hand. (1 of 1)
Thank You!

Loaner Program

Sphero Bolt
Click to Learn More

Ozobot Evo
Click to Learn More

Lego Spike Prime
Click to Learn More
Create stories, games, and animations
Share with others around the world

Start Creating  Join
My name is ______________, and I am a/an ______________.

My best friend is ______________. And he /she is a/an ______________.

We like to play ______________ at the ______________.

When we were younger. While playing we liked to listen to ______________, but if there was no music. We __________ until one of us would stop.
Welcome! We look forward to a great day.

Today’s agenda.
● Profile of SC Graduate
● Overview of Scratch
● Vocabulary
● Build some code
● Have Fun!
Confirm your Scratch account

You just signed up for a new Scratch account with the username: Little8568

To finish creating your account, click on the link below:

Having trouble? Copy this link into your browser instead:
https://scratch.mit.edu/accounts/email_verify/WzEwODQxMzEzMiwiA2xaXRX0bGVAZVQuRC2MuZ292lxmYWxzZV0:1pNy8O-KwW0v7Dzu0JMNH34sx1QoijMA5s/?isRegistration=true

Scratch On!
— The Scratch Team
Welcome to Scratch, Little8568!

With Scratch, you can program your own interactive stories, games, and animations—and share your creations with others in the community.

New to Scratch? Click the link below:

To learn more about the Scratch online community, go to our Community Guidelines
To discover project ideas, check out our Ideas Page.

Scratch On!
—The Scratch Team
Statement Blocks (h):
- A copy of a Sprite that is made using the control block.

Boolean Expressions (e):
- A mini program within a program that can execute at the same time.

Conditions (g):
- A placeholder for some value, much like x and y.

Loops (f):
- A signal from one thread to another.

Variables (c):
- Evaluates to true or false.

Threads (b):
- Include multiple executions of a statement.

Events (d):
- Something that must be true in order for something to happen.

Clone (a):
- Tells the computer to do something.
Statement Blocks

A statement tells the computer to do something. (command or instruction)

Any block whose label reads like a command is a statement.
Conditions

When Construct

when space key pressed

wait until
Boolean Expressions

An expression that is either true or false.

Any block shaped like an elongated diamond is a boolean.

With Booleans Expressions can we construct conditions.
Conditions

Something that must be true in order for something to happen.

“Evaluates to true” or “evaluates to false”

Any block whose label says “if”, “if else”, “when”, or “until”
Loops

- Can include multiple executions of a statement
- Any block whose label begins with “forever” or “repeat”
Variable

- A placeholder for some value, much like $x$ and $y$ are popular variables in algebra.
- Represented with blocks shape like elongated circles, uniquely labeled by you.
Creating a Variable

1. Click Make A Variable (Blocks Palette)
2. Name Variable (select preference)
3. Click OK

Variable in list!
Threads

- A mini program within a program that can execute at the same time as other threads.
- Any block whose label begins with “when” essentially denotes the start of a thread.
- Events or Control Block!
Events

- A signal from one thread to another
- Blocks whose label begin with “when” handle events
- Blocks whose label begin with “broadcast” signal events
Clone

- a copy of a Sprite that is made using the “Create clone of” control block.
Happy Valentine’s Day
Recruiting is NEEDED!

93% of parents want their child’s school to teach computer science, but only 53% of high schools offer it.

More than 70% of superintendents and principals say offering computer science is just as important as offering subjects like English, math, history, and science.

50% of Americans rank computer science as one of the two most important subjects of study after reading and writing.

Students who learn computer science in high school are six times more likely to major in it, and women are ten times more likely.

Black students are more interested in CS and more confident in their abilities than white students but are less likely to enroll in a class.

In South Carolina, there are currently 6,272 open computing jobs with an average salary of $77,383.

There are 60 colleges and universities in the U.S. state of South Carolina. Yet, there were only 806 graduates in computer science in 2019 and only 93% of all public high schools teach a foundational computer science course.
Are you ok with your students starting salary being higher than your max salary?
What shape will this code make?
When a theory or model explains a phenomena clearly, directly or economically.

Code with **BUGS** can never be elegant.
CAUTION

Stage selected: no motion blocks
What if I wanted to draw the lines of the shape?
Follow Mouse
Follow Me
Sprites

COSTUMES
Using Blocks to Animate!

Decomposed
107. That section of the Copyright Act says that there's no copyright infringement if the use of the material is fair, in other words "for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research."
4 Fair Use Factors

1. The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes
   Quoting a song’s lyrics in a review of the song, the album or a concert where the song was performed.

2. The nature of the copyrighted work
   Including a clip of a news program in a show commenting on how the news program handled the event covered.

3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole, and
   Paraphrasing text from a novel or nonfiction book in a collegiate essay.

4. The effect of the use upon the potential market for or value of the copyrighted work… Showing a nature documentary to a biology class.
Copyrights may last how long?
(Choose all that apply)

a. 25
b. 50
c. 70
d. 95
e. 120
Copter Game

Adding levels
Extensions
Scratch Tips

Add Images From Outside Scratch

BootUp
Scratch Tips

Toggle Music With a Button

BootUp