

Scratch Day Activity Ideas

Scratch Days come in all shapes and sizes! We encourage organizers to design activities and experiences that are most relevant to the interests of your community. Consider convening a committee of young people to help plan the event or survey students to get an idea of what workshops would be most inspiring (see our Scratch Day Youth Leadership document for more information). The activity ideas below are some suggested offerings gathered from Scratch Foundation resources, partners, and from our past experience hosting Scratch Day in person. You are welcome to use or remix these ideas as you plan your Scratch Day agenda.

Imagine Getting Started

Plan

Show participants how to create their first project using Scratch or ScratchJr with these activities.

Invite

Getting Started with Scratch (link) Post

> Learn Scratch fundamentals, create your first project, and share it with the community with the help of the Getting Started <u>quide</u> and <u>tutorial</u>, or <u>Getting</u> Started in ASL.

ScratchJr Activities (link)

Try out the ScratchJr app, where caregivers and children can work together to create their own interactive stories and games.



Project Workshops

Mix and match these activities to use throughout your Scratch Day. See our printable, student-facing coding cards for more guidance or our Starter Projects page for additional project ideas.

Animate Your Name (link)

Make your name come to life! Animate the letters of a name, initials, or favorite word.

Scenes From A Story (link)

Animate your favorite scenes from a book, movie, or play or create your own story.

Interactive Greeting Card (link)

Create a card for a friend or family member. You could remix a card template or create your own.

Flying Character Game (link)

Design a game to help a character avoid flying into obstacles.

Create A Virtual Pet (link)

Code your own virtual pet with animations, sounds, or other effects.

Make a Virtual Stamp Collage (link)

Use the Pen extension stamp block and create art with sprites and code.

Imagine

Interactive Poster (link)

Plan

Invite

Post

Have a favorite hobby, sport, book, or other passion you'd like to teach others about? Make an interactive poster to share key information.

Explore Video Sensing (link)

Use your laptop's built-in camera or an external webcam to <u>interact with sprites on the stage</u>.

<u>Virtual Passport of Your Scratch Day</u> (link)

Find or design sprites to represent the activities you tried on Scratch Day and add them to a virtual passport to share about your experience, what you learned, and how much fun you had.

Record an Audio Message, or use the Music or Note Blocks to Create a Song (links)

Use the recording function in Scratch to record yourself celebrating Scratch Day, singing a song, or sharing your favorite Scratch advice. Or use the note blocks from the sound library or the Music extension blocks to create an original sound effect, <u>musical score</u>, or <u>instrument</u>.

Scratch Lab (link)

Explore experimental blocks developed by the Scratch team, including <u>Face Sensing</u> and <u>Video Sprite</u> blocks.

Interested in learning more about playing with Face Sensing? See our <u>"Exploring Scratch & Al: Possibilities & Pitfalls" lesson plan</u>.

Design Your Own Sprite (links below)

Use the paint editor to <u>create an original</u> <u>sprite</u>, <u>remix a sprite from the library</u>, or draw and <u>upload your own</u>.

Pong (link)

Design and code a bouncing ball game, then challenge your friends to play.

Create a Maze (link)

Navigate a sprite <u>with arrow keys</u> through a maze by coding impassable walls using color sensing. For a challenge, add obstacles or a second sprite to race against.

Use a Project Idea Generator (link)

Search Scratch to find a silly prompt generator to get the project ideas flowing, or create your own.



Imagine Unplugged Creative Learning Activities

Plan Include unplugged activities that encourage experimenting with materials in new ways!

Invite

Post

LEGO and Scratch: "Build the Change" (link)

Create building solutions to real-world sustainability challenges using the objects you have around you! Then, create a Scratch project that incorporates the model, bringing to life ideas on how to integrate sustainable elements.

Making Faces by the Tinkering Studio (link)

Use craft materials, small objects, and recyclables to design your own self portrait. Consider bringing it into Scratch to animate!

Scratch Printable Blocks (links below)
Use these <u>3D printable Scratch blocks</u>
(shared by Sunyani Senior High School,
Ghana) or <u>these 3D blocks</u> (created in
partnership between Nextech, the SEC,
and Process Art Studio) to create your own
unplugged Scratch script. Or use these <u>2D</u>
printable Scratch block posters.

Scratch Tips Poster, Book, or Zine

Pick from a variety of scrap papers, drawing tools, stickers, etc., and make your own informational resource to share your Scratch knowledge with others! You can even photograph it, and upload the images into Scratch to animate.

Create a Morse Code Bracelet (link)

Computers speak the language of ones and zeros, and humans have used forms of communication like Morse Code to speak without words through electrical pulses. Recreate your name or initials using dots and dashes represented by beads using this helpful guide from the National Inventors Hall of Fame.

Pixel Pals

Design your own Scratch sprite in the 8-bit style on grid paper. Then, you could use fuse beads/Perler Beads to create a physical copy of your creation. Or try Pixel Programming with a partner.

Scratch Design Journal (link)

Use colored paper, markers, and more to create a cover for your design journal. Inside can be templated pages to store ideas, reflections, etc.

ScratchJr Printable Blocks (links below)
Use the printable ScratchJr blocks on this page to create your own unplugged project activity. Or explore the ScratchJr Tactile 3D printable blocks open source project from Sistema THEAD, aimed to be inclusive of students with visual or other impairments.

Legos Maze Coding (link)

Design a simple maze using Lego bricks. Now, using four commands: move forward, move backward, turn left, and turn right, can you direct a character through the maze successfully by writing an algorithm on a piece of paper?



Imagine Collaborative Activities

Plan Participants can work in groups on a collaborative Scratch project.

Invite Use a Webcam (link)

Post Use video sensing to insert yourself and others into an interactive Scratch project with a webcam.

Dance Party (link)

Code a <u>dancing sprite using loops</u> and costume changes. <u>Create a dance party project</u> with each person's favorite sprite and watch sprites dance together. Or <u>code a sprite to dance based on "loudness"</u> and see if you can work as a group to make it dance.



Pair Programming Cup Stack Coding (link)

For some offline fun, using simple commands: up, down, left, and right, one "programmer" directs another "computer/robot" participant to try and stack up cups. See this resource from Code.org for more instruction. Now try coding a project together in Scratch, taking turns as the programmer directing each other on which blocks to use and the sequence.

Activity Swap/Show and Tell (link)

Show off and explain your favorite Scratch creations, then <u>teach your skills</u> to the group.

Make a Beat (link)

Add loops or beats from Scratch or your own recordings, pass it on to a friend, and layer the beats to make a song. Collaborate to create a band using instrument sprites. Or use keyboard keys, video sensing, or a Makey Makey to play it together.

Creative Character Conversations (link)

Take turns coding a conversation between two favorite characters.

Extending the Story (link)

Write the beginning of a story and invite others to finish it by remixing and adding the next scene, a new character, or more dialogue.

Simon Says Conditional Statements (link)

Explore if/then and while conditional blocks using an unplugged game of Simon Says. One person functions as the programmer while the participants, as computers, need to determine if statements are true or false and then act accordingly. Now try using a conditional block in a Scratch project, like coding an effect if sprites touch or while the mouse is clicked.

Imagine Physical World Activities

Plan Make connections to the physical world with these hands-on activities.

Invite Micro:bit and Scratch (link)

Post Create a game controller or trigger actions in a Scratch project with a micro:bit device.

Some project ideas can be found here.

Paper Planes and Pair Programming (link)

Test your skills writing or following clear step-by-step instructions to create a paper plane and see if it flies. Now in Scratch think about writing clear instructions for a program. Were you successful?

Makey Makey and Scratch (link)

Turn conductive items into keyboard keys by programming Makey Makey with Scratch. <u>Create games, instruments, or interactive drawings</u>.



Scratch for Educators and Caregivers

Introduce members of your community to Scratch with these resources.

Scratch in Your School (links below)

Explore <u>Scratch Educator Meetups</u> and the <u>Creative Computing Guide</u>. Brainstorm ways to bring Scratch to your school.

Family Creative Learning (link)

Use the Family Creative Learning Facilitator Guide to start planning creative computing workshops for whole families.

Scratch in Your Community

Start a conversation: How might you bring Scratch to your children's clubs and camps?





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