STORY TIME!

Story creation with Scratch provides opportunities to explore a variety of computational concepts and skills. Here are some blocks that are frequently useful in stories.

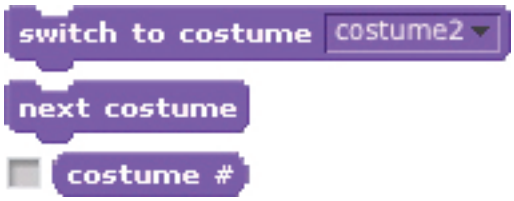
WAIT
Insert a pause

SAY/THINK
Have a speech or thought bubble appear over a sprite

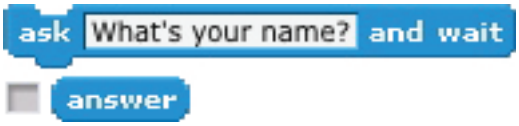
SOUNDS
Play recorded audio

VISIBILITY
Make a sprite appear or disappear

COSTUMES
Change the appearance of your sprite



ASK
Get input to use in a project

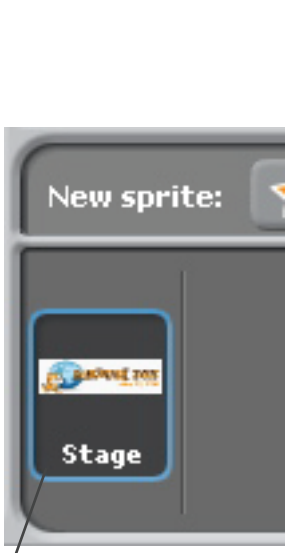


STRINGS
Test, access, and change words and sentences

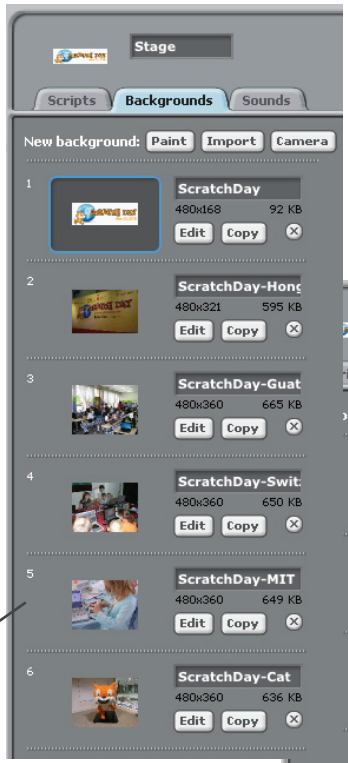
COORDINATE
Synchronize actions between and within sprites

SLIDESHOW

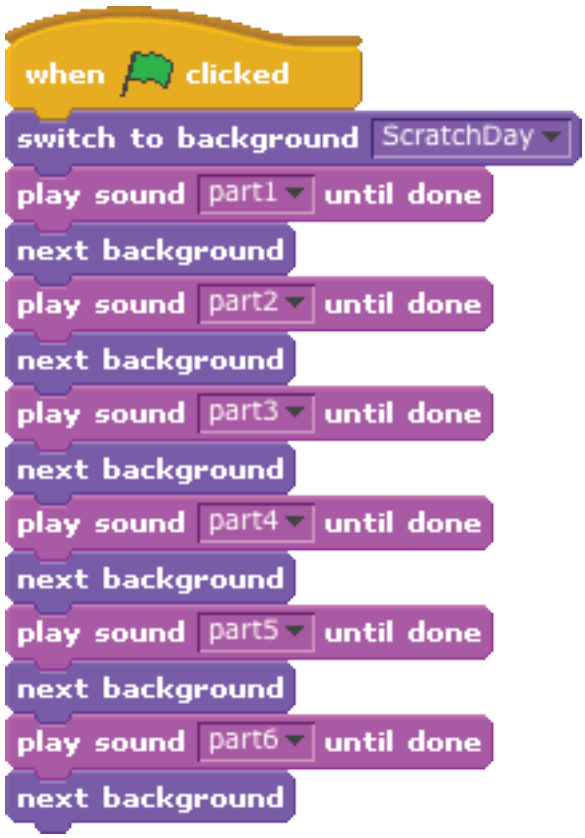
Create your own slideshow – a collection of background images accompanied by audio narration.



1 script
6 background images
6 recorded sounds

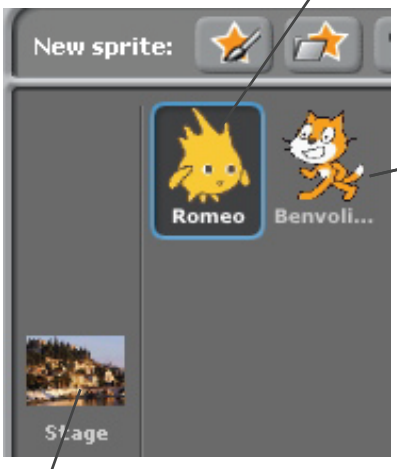


record your narration right in Scratch
with the sound recorder



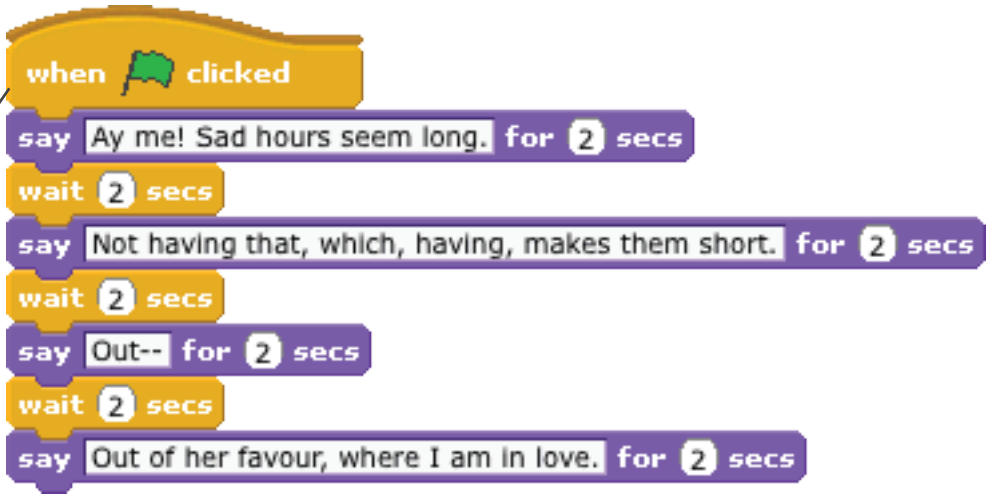
CONVERSATION

Get two characters talking to each other. Use the **say** and **wait** blocks to coordinate the conversation.

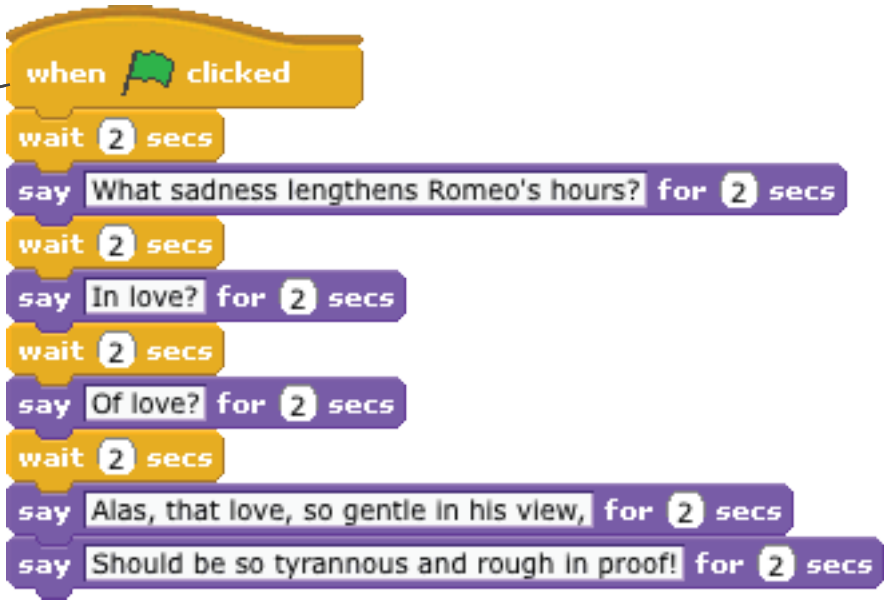


no scripts
add a background image

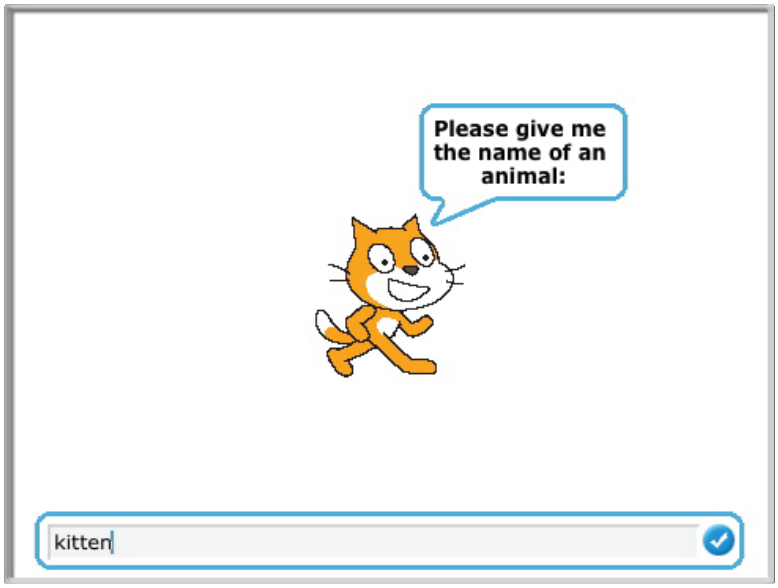
1 script



1 script



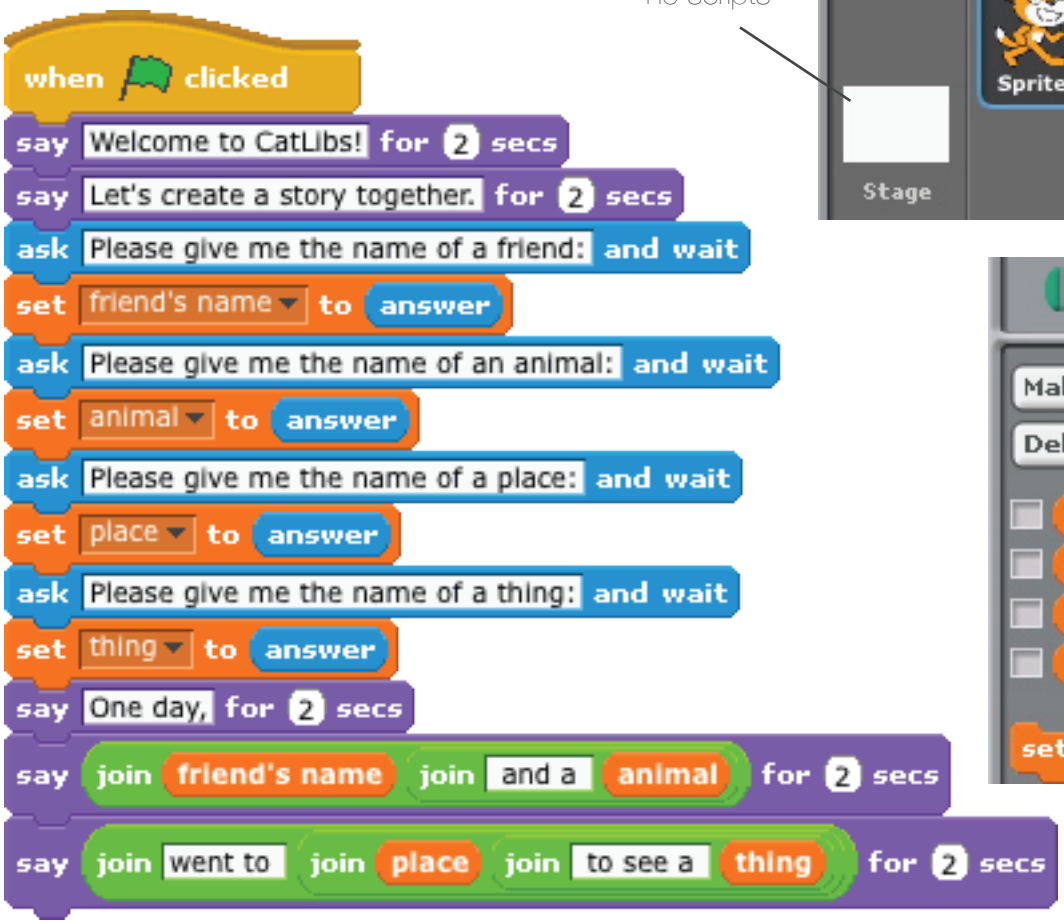
CATLIBS

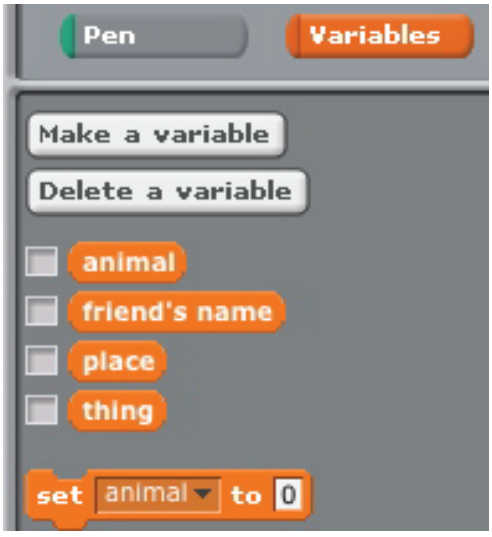


Dynamically create a surprising story. Use the **ask**, **say**, **join** blocks, and **variables** to compose a short story based on suggested words.

no scripts

1 script
4 variables





SCENES

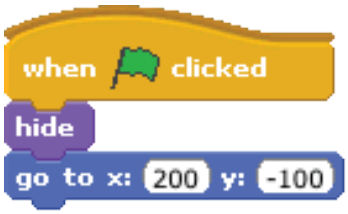
Use the **broadcast** and **when I receive** blocks to create a multi-scene story.

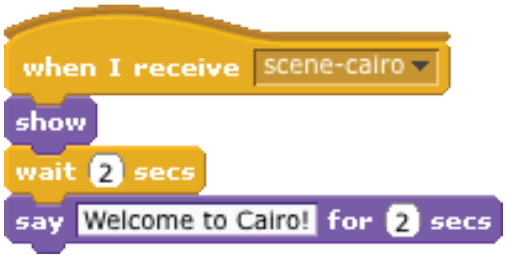
add 3 background images

4 scripts

4 scripts

2 scripts





LET'S PLAY!

Like the other genres we've already explored, games provide numerous opportunities to explore a variety of computational concepts and skills. Here are some blocks that are frequently useful in games.

TOUCHING

See if two sprites are touching or if a sprite is touching a color

VISIBILITY

Make a sprite appear or disappear

RANDOM

Get a computer-generated number from within a specified range

TIMING

Have the computer keep track of time for you

STRINGS

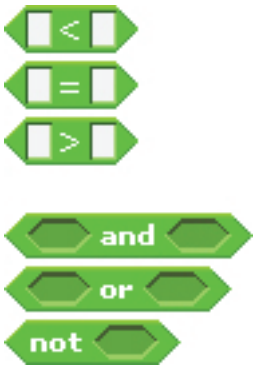
Test, access, and change words and sentences

VARIABLES

Store a number or string in a container to access later

COMPARE

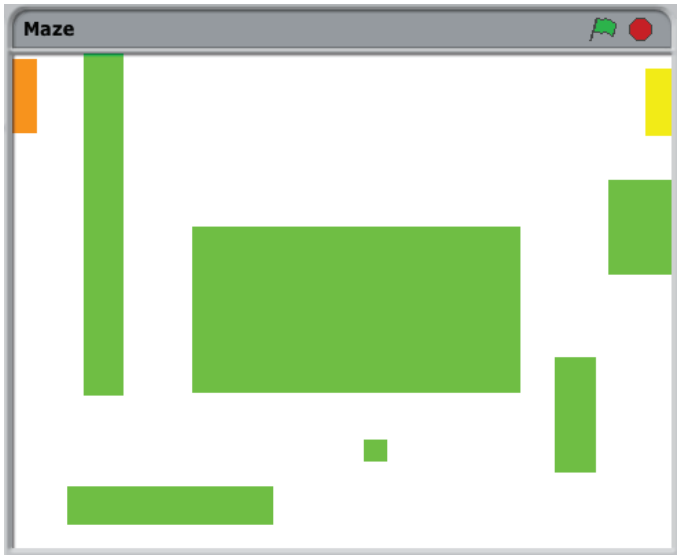
Compare values to help make decisions within your game



KEY PRESS

Make a sprite respond when different keys are pressed

MAZE



GOAL
Get from the start of the maze to the end

RULES
Don't touch the green walls

OUTCOME
Win when the yellow marker is reached

7 scripts

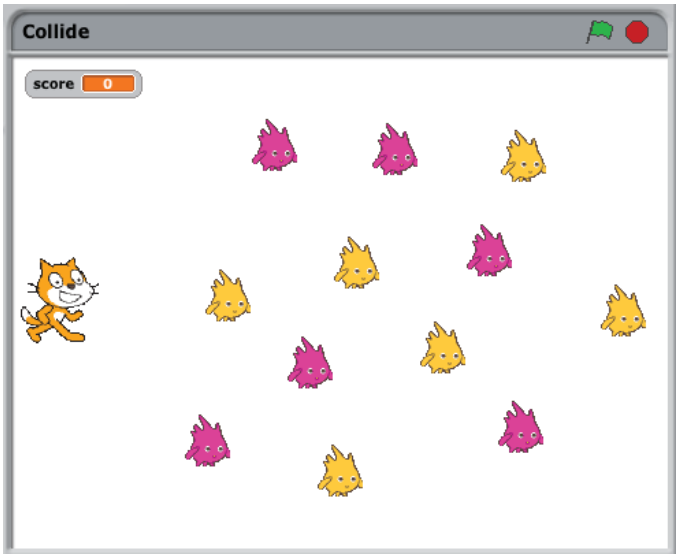
no scripts, draw a maze-like background with colored walls and a differently colored end marker

move the sprite around

have the sprite bounce off the green walls

players wins when sprite reaches the yellow end marker

COLLIDE



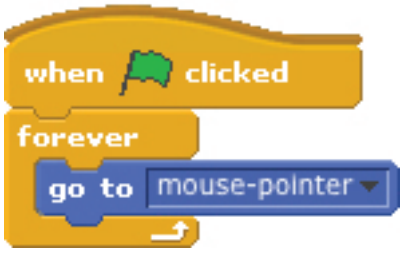
GOAL
Help the cat navigate a gobo minefield

RULES
Collect yellow gobos to earn points,
avoid pink gobos to avoid losing points

OUTCOME
Maximize your score

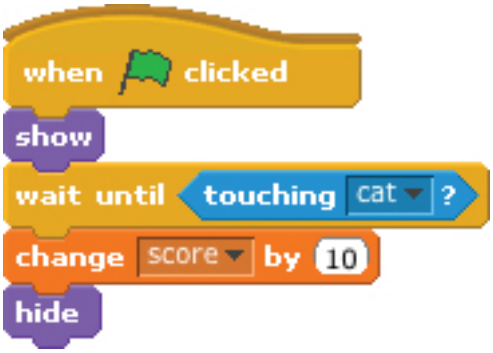
no scripts

reset the cat's position and the score

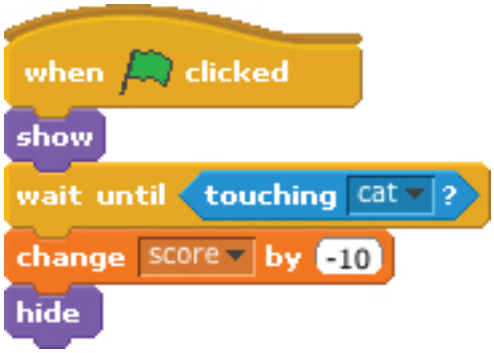


have the cat follow the mouse cursor

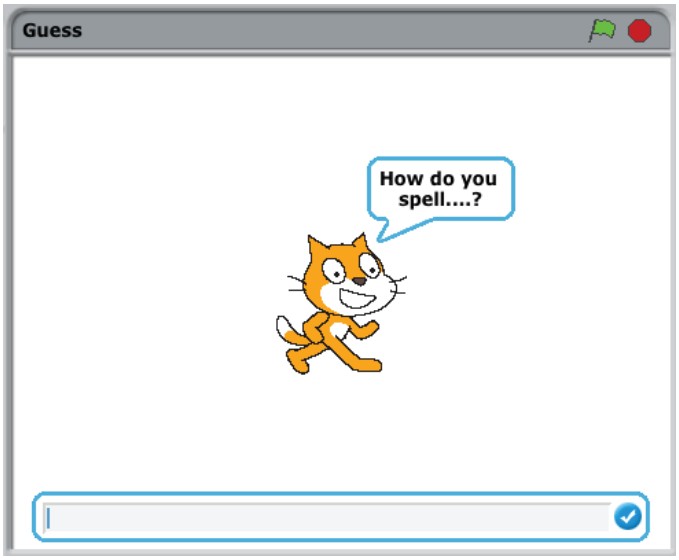
when the cat collides with a yellow gobo, the gobo disappears and the score increases by 10



when the cat collides with a pink gobo, the gobo disappears and the score decreases by 10



GUESS

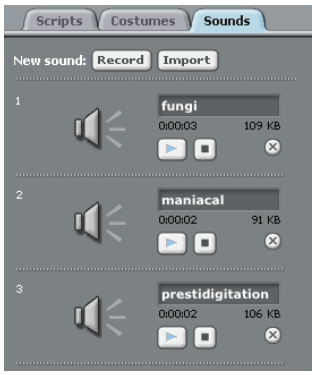


GOAL
Test your spelling abilities

RULES
Type the words spoken by the cat

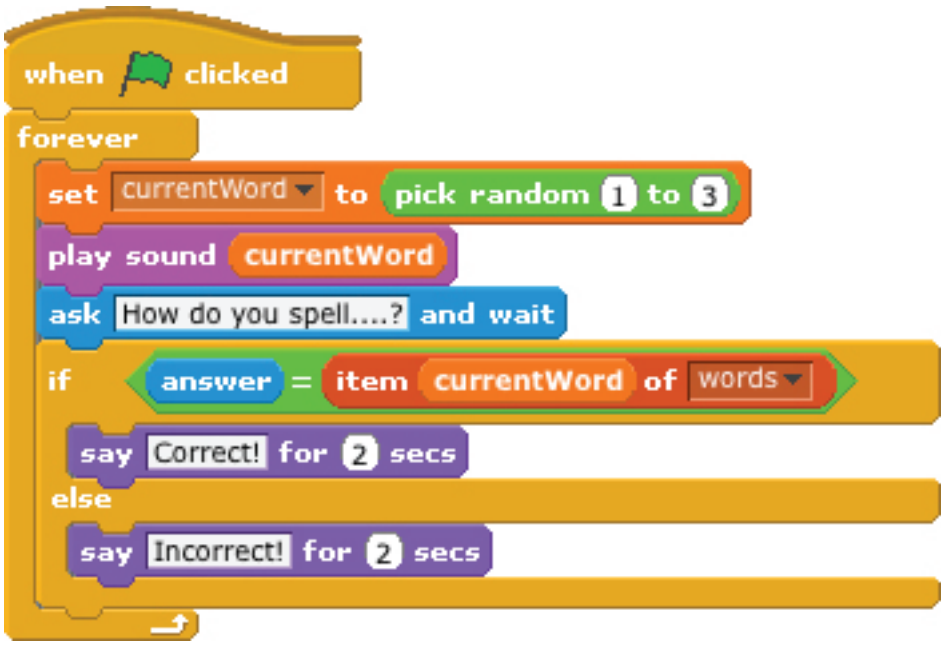
OUTCOME
Learn whether you spelled each word correctly

create a list of words and audio-record their pronunciations



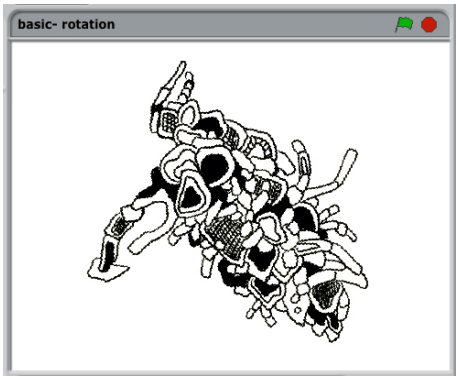
1 script

no scripts



GOT ART?

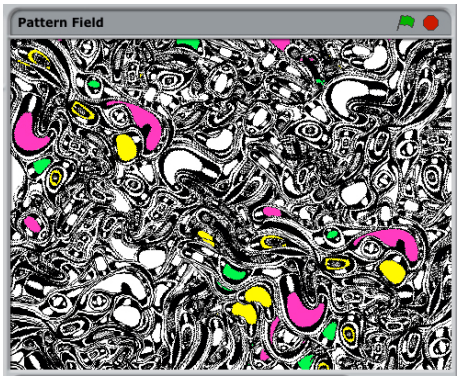
Creating art projects offers a slightly different perspective when using Scratch and a chance to think of new and exciting ways to experiment with computational concepts and skills. The following five projects will enable you to explore Scratch by creating abstract works.



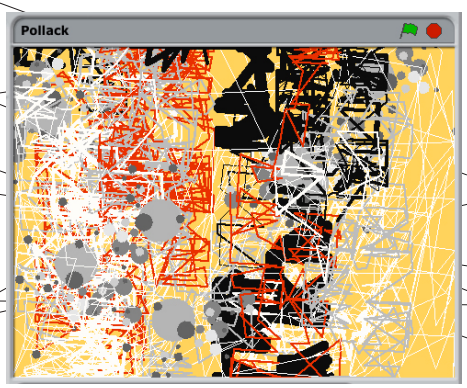
1) Back to the Basics: learn some basic block combos that are important to this project series

2) Randomization: learn some ways to switch up the scripts from “Back to the Basics”using the “Pick Random” block

3) Automatic Drawing: create a self-creating drawing using the skills learned from Project 1 and 2



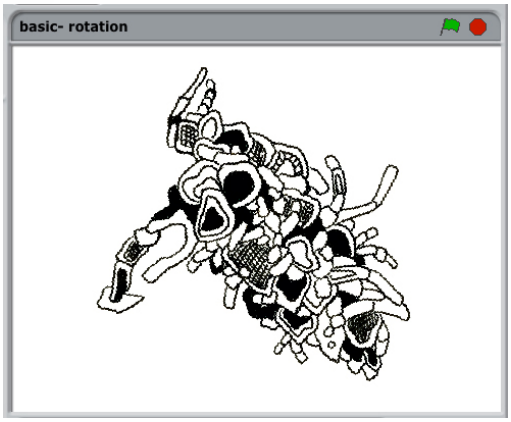
4) Pattern Field: create a partly interactive pattern field based on repeating units



5) Make a Pollock (CHALLENGE): create your own Pollock-esque original using blocks combinations learned from previous projects and experimentation

Back to the Basics

objective: learn some basic block combos that are important to this project series

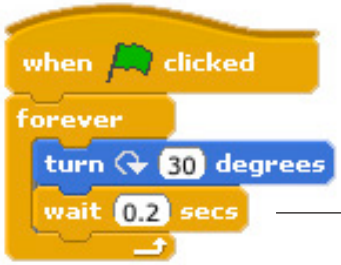


Behind the Scenes:

stage: no scripts, no background

sprite1: image without point symmetry

Rotation

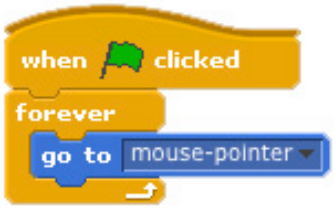


allows the rotation to occur at a time interval so you can see it move

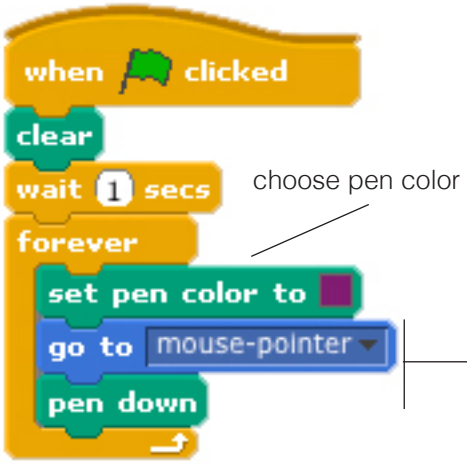
to stop the script

Movement

sprite1 follows mouse pointer. repeatedly

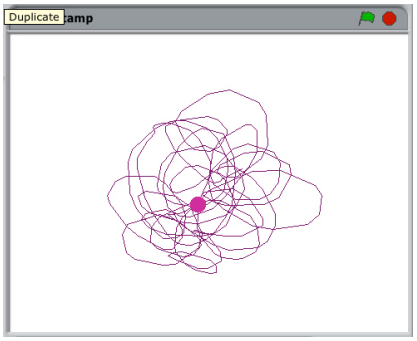


Stamping (Drawing)



choose pen color

pen draws, following mouse-pointer

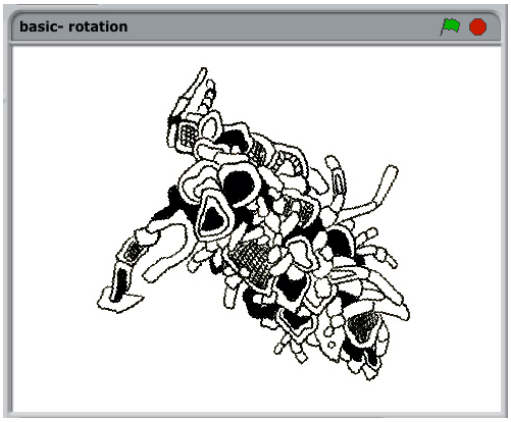


stage: no scripts, no background

sprite1: simple, a dot works

Randomization

objective: learn some ways to switch up the scripts from "Back to the Basics"using the "Pick Random" block



Behind the Scenes:

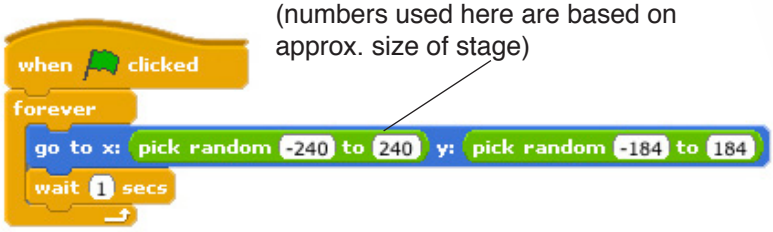
stage: no scripts, no background

sprite1: image without point symmetry

Random Rotation

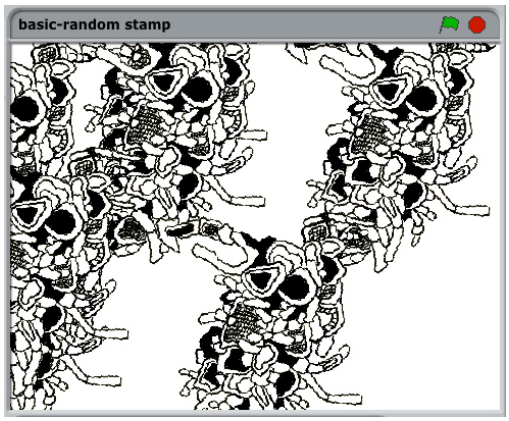
Random Movement

sprite moves to a random position (numbers used here are based on approx. size of stage)



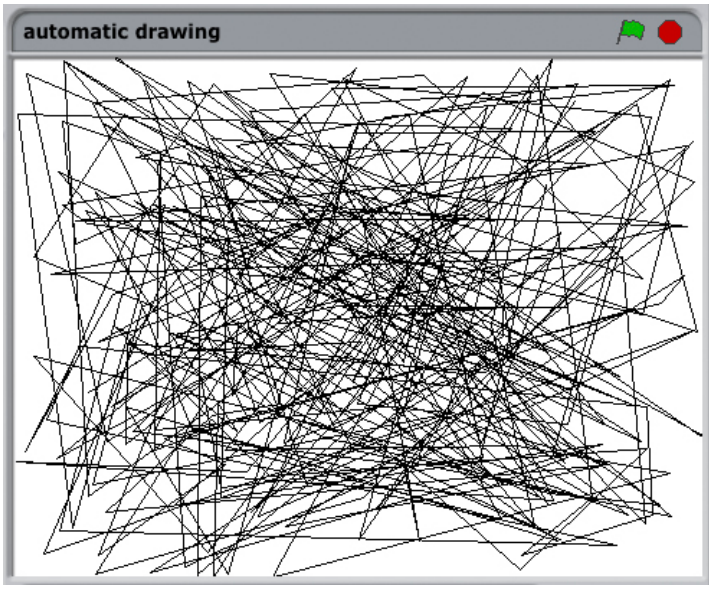
Random Stamping

the image clears at the beginning every time you run the script



Automatic Drawing

objective: create a self-creating drawing



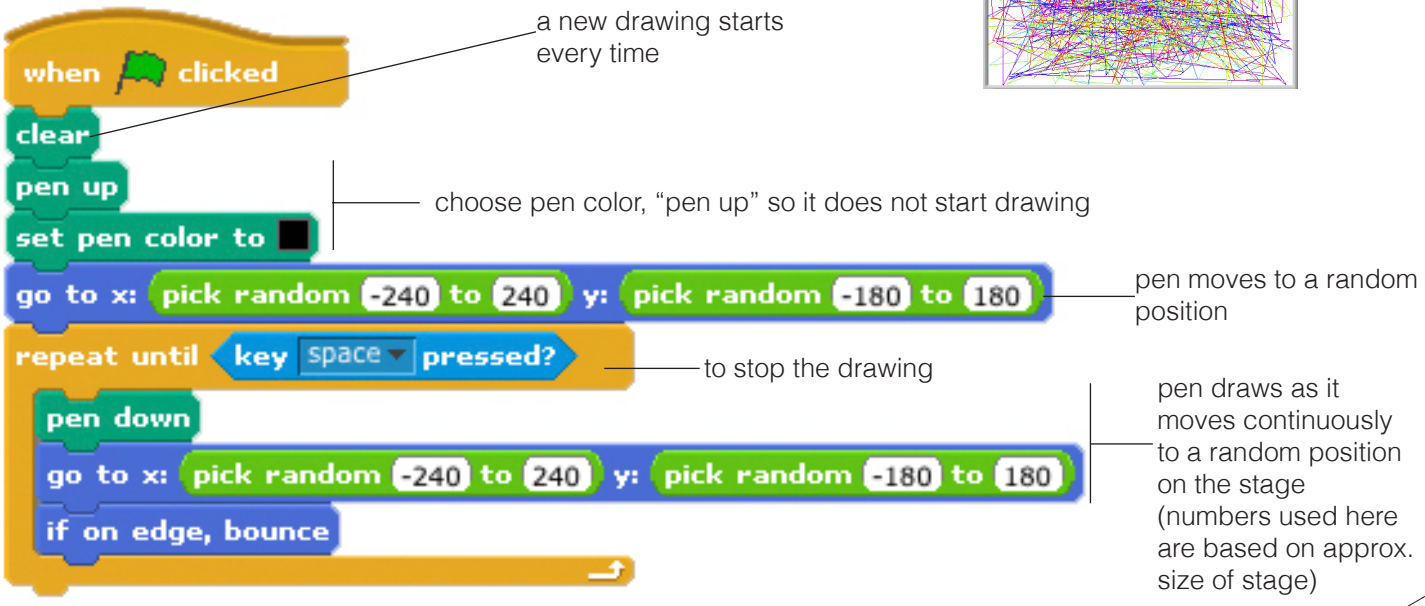
Behind the Scenes:

stage: no scripts, no background

sprite1: simple, a dot works

(optional)

adding this block after "if on edge, bounce" block will create a crazy colorful image!



a new drawing starts every time

choose pen color, "pen up" so it does not start drawing

pen moves to a random position

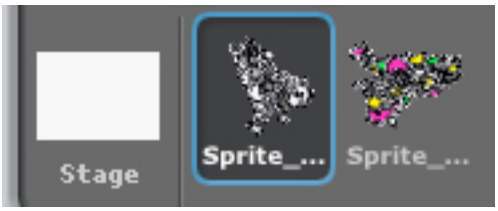
to stop the drawing

pen draws as it moves continuously to a random position on the stage (numbers used here are based on approx. size of stage)

Pattern Field

objective: create a partly interactive pattern field based on repeating units

Behind the Scenes:



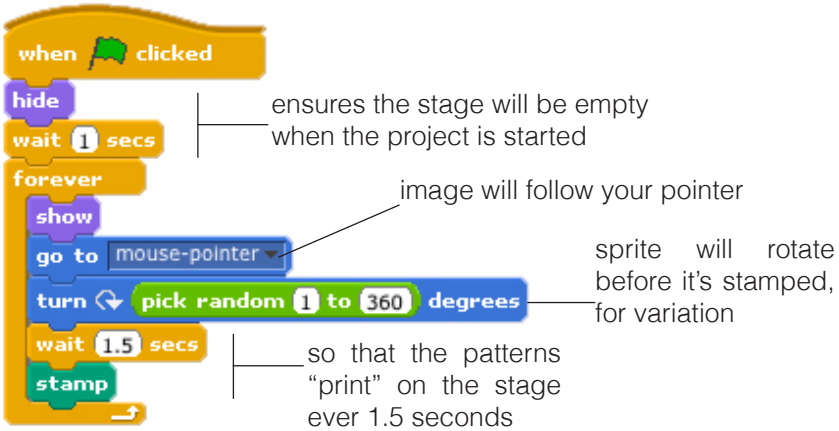
stage: no scripts, no background

sprite 1: a found or hand drawn image with a striking pattern, preferably with interesting large spaces

sprite 2: an edited version of sprite 1 with some of the large spaces filled with bright color

the image will be half interactive and half automatic, therefore, two sprites will be made

Sprite 1



ensures the stage will be empty when the project is started

image will follow your pointer

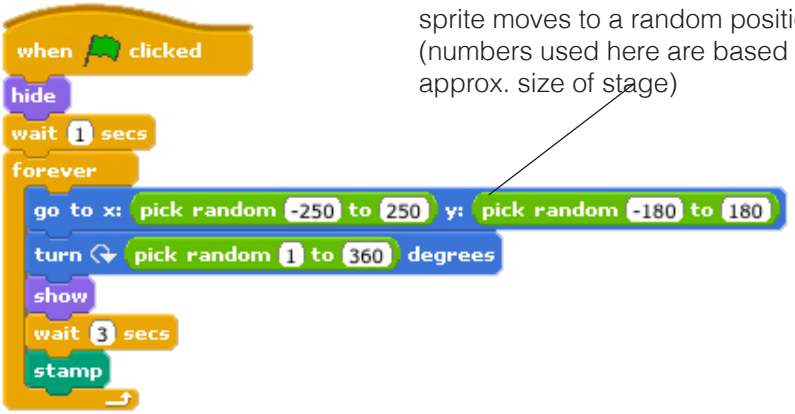
sprite will rotate before it's stamped, for variation

so that the patterns "print" on the stage ever 1.5 seconds

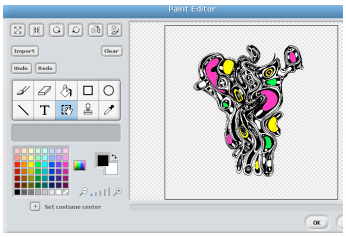
example Sprite 1

the pattern field is cleared when the space key is pressed

Sprite 2



sprite moves to a random position (numbers used here are based on approx. size of stage)



Sprite 2 made by editing Sprite 1 in Scratch