

# UNIT 1

## EXPLORING



YOU ARE HERE

WHAT'S INCLUDED



PROGRAMMED TO DANCE  
STEP-BY-STEP  
TO BLOCKS  
MY STUDIO  
DEBUG IT!  
ABOUT ME



# PROGRAMMED TO DANCE REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION  
PROMPTS USING THE SPACE PROVIDED  
BELOW OR IN YOUR DESIGN JOURNAL.

+ What was easy/difficult about being the bossy partner?

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+ What was easy/difficult about being the bossed partner?

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+ What was easy/difficult about watching?

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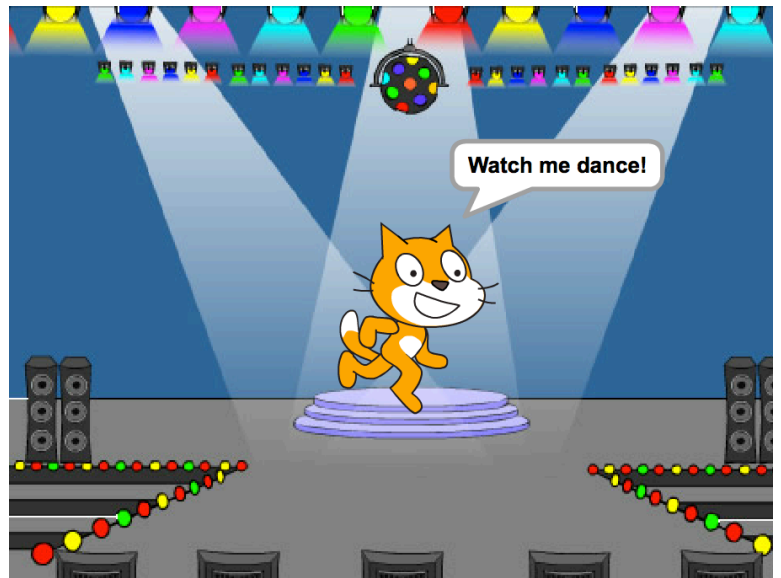
+ How does this activity relate to what we're doing with Scratch?

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# STEP-BY-STEP

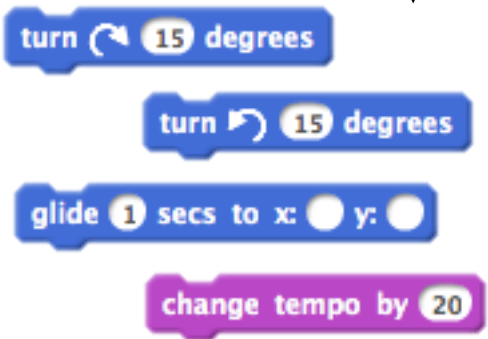
NEW TO SCRATCH? CREATE YOUR FIRST SCRATCH PROJECT!

In this activity, you will follow the Step-by-Step Intro in the Tips Window to create a dancing cat in Scratch. Once you have completed the steps, experiment by adding other Scratch blocks to make the project your own.

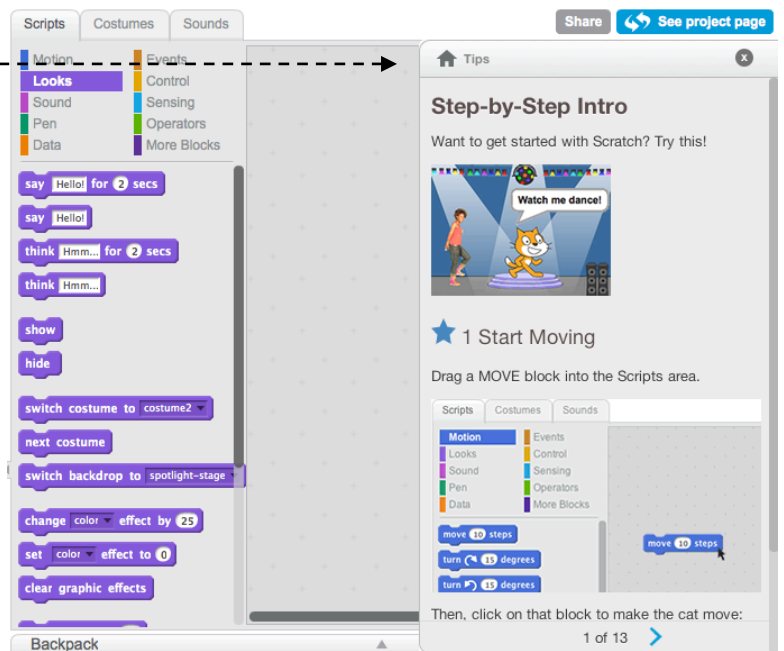


## START HERE

- Follow the Step-by-Step Intro in the Tips Window.
- Add more blocks.
- Experiment to make it your own!



What blocks do you want to experiment with?



## THINGS TO TRY

- Try recording your own sounds.
- Create different backdrops.
- Turn your project into a dance party by adding more dancing sprites!
- Try designing a new costume for your sprite.

## FINISHED?

- + Add your project to the Step-by-Step Studio: <http://scratch.mit.edu/studios/475476>
- + Challenge yourself to do more! Play with adding new blocks, sound, or motion.
- + Help a neighbor!
- + Choose a few new blocks to experiment with. Try them out!

# STEP-BY-STEP REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION PROMPTS USING THE SPACE PROVIDED BELOW OR IN YOUR DESIGN JOURNAL.

+ What was surprising about the activity?

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+ How did it feel to be led step-by-step through the activity?

---

+ When do you feel most creative?

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# 10 BLOCKS

WHAT CAN YOU CREATE WITH ONLY 10 SCRATCH BLOCKS?

Create a project using only these 10 blocks. Use them once, twice, or multiple times, but use each block at least once.

## START HERE

- Test ideas by experimenting with each block.
- Mix and match blocks in various ways.
- Repeat!

FEELING  
STUCK?

THAT'S OKAY! TRY THESE THINGS...

- Test ideas by trying out different block combinations. Mix and match blocks until you find something that interests you!
- Try brainstorming ideas with a neighbor!
- Explore other projects to see what others are doing in Scratch. This can be a great way to find inspiration!

go to x: 0 y: 0

glide 1 secs to x: 0 y: 0

say Hello! for 2 secs

show

hide

set size to 100 %

play sound meow until done

wait 1 secs

when this sprite clicked

repeat 10

FINISHED?

- + Add your project to the 10 Blocks Studio: <http://scratch.mit.edu/studios/475480>
- + Play with different sprites, costumes, or backdrops.
- + Challenge yourself to do more! See how many different projects you can create with these 10 blocks.
- + Swap projects with a partner and remix each others' creations.

# 10 BLOCKS REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION PROMPTS USING THE SPACE PROVIDED BELOW OR IN YOUR DESIGN JOURNAL.

+ What was difficult about being able to use only 10 blocks?

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+ What was easy about being able to use only 10 blocks?

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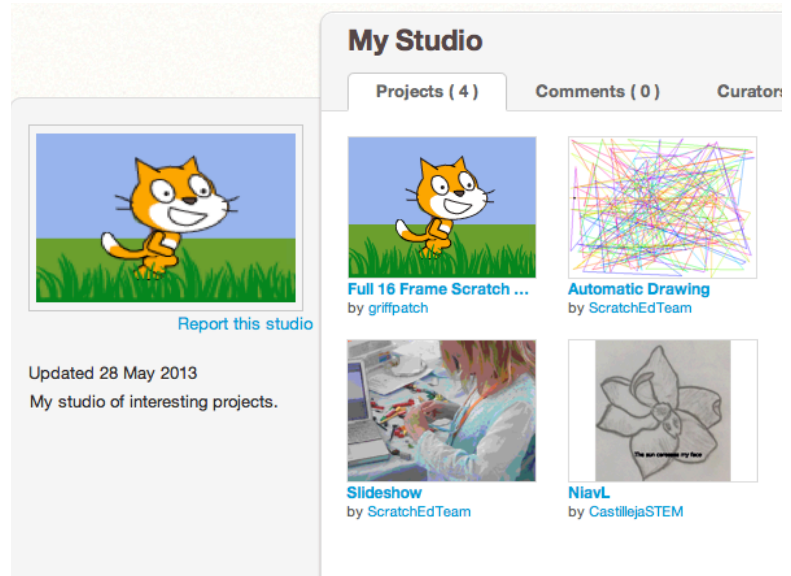
+ How did it make you think of things differently?

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# MY STUDIO

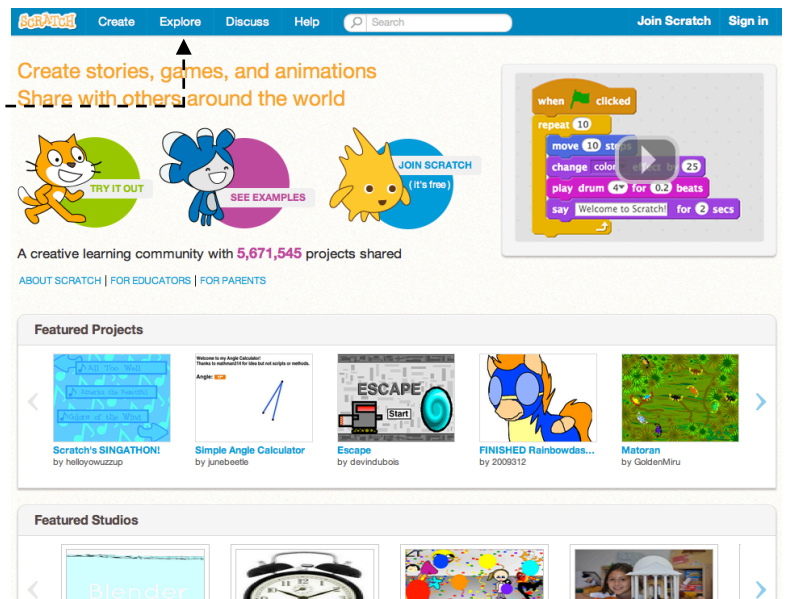
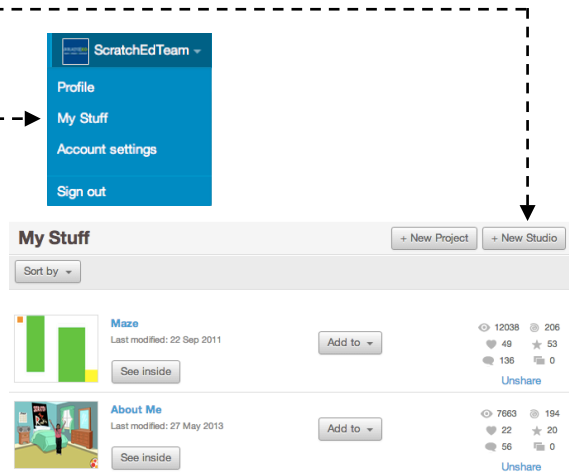
WHAT CAN BE CREATED WITH SCRATCH?

In this activity, you will investigate the range of creative possibility with Scratch by exploring some of the millions of projects on the Scratch website – and start a collection of favorites in a Scratch studio!



## START HERE

- Browse projects on the Scratch homepage OR click on “Explore” to search for specific types of projects.
- Create a new studio from your My Stuff page.
- Add three (or more!) inspiring projects to your studio.



## THINGS TO TRY

- Use the search bar to find projects that relate to your interests.
- Explore each of the Animations, Art, Games, Music, & Stories categories on the Explore page.
- Look through the Featured Studios on the homepage for ideas.

## FINISHED?

- + Challenge yourself to do more! The more Scratch projects you explore, the more you learn about what can be accomplished in Scratch!
- + Find studios created by other Scratchers that you find interesting!
- + Ask a neighbor what strategies they used to find interesting projects.
- + Share your newly created studio with a neighbor!



# MY STUDIO REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION PROMPTS USING THE SPACE PROVIDED BELOW OR IN YOUR DESIGN JOURNAL.

+ What search strategies did you use to find interesting projects?

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+ How might each example project help with future work?

---

+ It's important to give credit to sources of inspiration.  
How can you give credit for inspiration from these projects?

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# DEBUG IT!

HELP! CAN YOU DEBUG THESE FIVE SCRATCH PROGRAMS?

In this activity, you will investigate what is going awry and find a solution for each of the five Debug It! challenges.

## START HERE

- ❑ Go to the Unit 1 Debug It! studio:  
<http://scratch.mit.edu/studios/475483>
- ❑ Test and debug each of the five debugging challenges in the studio.
- ❑ Write down your solution or remix the buggy program with your solution.

FEELING  
STUCK?

THAT'S OKAY! TRY THESE THINGS...

- ❑ Make a list of possible bugs in the program.
- ❑ Keep track of your work! This can be a useful reminder of what you have already tried and point you toward what to try next.
- ❑ Share and compare your problem finding and problem solving approaches with a neighbor until you find something that works for you!

### ❑ **DEBUG IT! 1.1** <http://scratch.mit.edu/projects/10437040>

When the green flag is clicked, both Gobo and Scratch Cat should start dancing. But only Scratch Cat starts Dancing! How do we fix the program?

### ❑ **DEBUG IT! 1.2** <http://scratch.mit.edu/projects/10437249>

In this project, when the green flag is clicked, the Scratch Cat should start on the left side of the stage, say something about being on the left side, glide to the right side of the stage, and say something about being on the right side. It works the first time the green flag is clicked, but not again. How do we fix the program?

### ❑ **DEBUG IT! 1.3** <http://scratch.mit.edu/projects/10437366>

The Scratch Cat should do a flip when the space key is pressed. But when the space key is pressed, nothing happens! How do we fix the program?

### ❑ **DEBUG IT! 1.4** <http://scratch.mit.edu/projects/10437439>

In this project, the Scratch Cat should pace back and forth across the stage, when it is clicked. But the Scratch Cat is flipping out – and is walking upside down! How do we fix the program?

### ❑ **DEBUG IT! 1.5** <http://scratch.mit.edu/projects/10437476>

In this project, when the green flag is clicked, the Scratch Cat should say 'Meow, meow, meow!' in a speech bubble and as a sound. But the speech bubble happens before the sound – and the Scratch Cat only makes one 'Meow' sound! How do we fix the program?

## FINISHED?

- + Discuss your testing and debugging practices with a partner. Make note of the similarities and differences in your strategies.
- + Add code commentary by right clicking on blocks in your scripts. This can help others understand different parts of your program!
- + Help a neighbor!

# DEBUG IT! REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION  
PROMPTS USING THE SPACE PROVIDED  
BELOW OR IN YOUR DESIGN JOURNAL.

+ What was the problem?

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+ How did you identify the problem?

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+ How did you fix the problem?

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+ Did others have alternative approaches to fixing the problem?

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# ABOUT ME

HOW CAN YOU COMBINE INTERESTING IMAGES AND SOUNDS TO MAKE AN INTERACTIVE COLLAGE ABOUT YOURSELF?

Experiment with sprites, costumes, backdrops, looks, and sounds to create an interactive Scratch project – a project that helps other people learn more about YOU and the ideas, activities, and people that you care about.



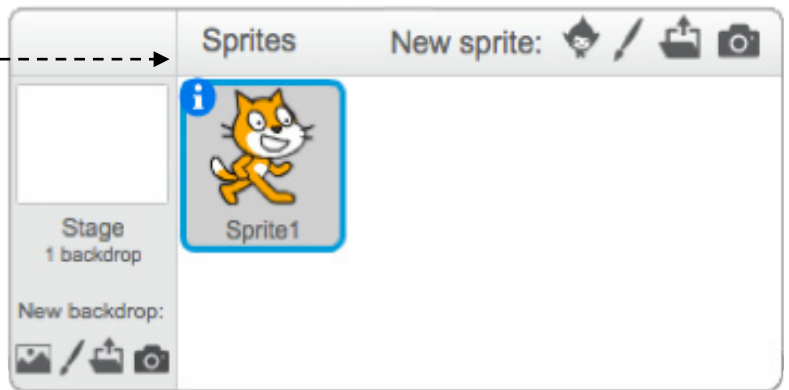
## START HERE

- Create a sprite.
- Make it interactive.
- Repeat!

```
when this sprite clicked
  play sound whoop until done
```

```
when this sprite clicked
  repeat 10
    turn 15 degrees
    wait 3 secs
    turn 15 degrees
    wait 3 secs
```

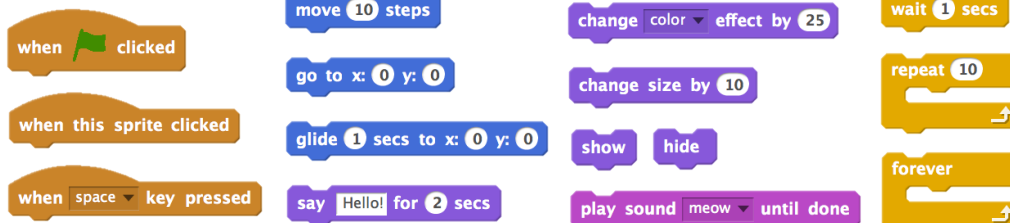
Make your sprite interactive by adding scripts that have the sprite respond to clicks, key presses, and more!



## THINGS TO TRY

- Use costumes to change how your sprite looks.
- Create different backdrops.
- Try adding sound to your project.
- Try adding movement into your collage.

## BLOCKS TO PLAY WITH



## FINISHED?

- + Add your project to the About Me Studio: <http://scratch.mit.edu/studios/475470>
- + Challenge yourself to do more! Play with adding new blocks, sound, or motion!
- + Help a neighbor!

# ABOUT ME REFLECTIONS

NAME:

RESPOND TO THE FOLLOWING REFLECTION PROMPTS USING THE SPACE PROVIDED BELOW OR IN YOUR DESIGN JOURNAL.

+ What are you most proud of? Why?

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+ What did you get stuck on? How did you get unstuck?

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+ What might you want to do next?

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+ What did you discover from looking at others' About Me projects?

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