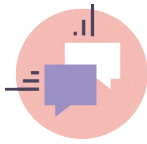


Lesson 4: Dance Off  
Online



## OVERVIEW

In this lesson, students learn how to plan, code, and validate their work by creating a dance off with their sprites on Scratch.

# Print PDF

[Print this lesson](#)



## OBJECTIVES

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- I can code a sequence of actions in the order I want them performed.
- I can use the editor, block palette, and stage in Scratch to code my program.



## AGENDA

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Do Now (5 min) - logging in

- Code Along (15 min): If You Give a Mouse a Cookie
  - Plan - read "If you give a mouse a cookie" instructions
  - Code - code along to the story
  - Debug - add wait blocks to debug
- Code Along (25 min): Dance Off *Plan - write out directions to your dance* Code - code your dance \*Debug - add wait blocks to debug
- EXTENSION (15 min): Coding Challenges



## VOCAB

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- Editor: A program designed for editing computer code by coders.



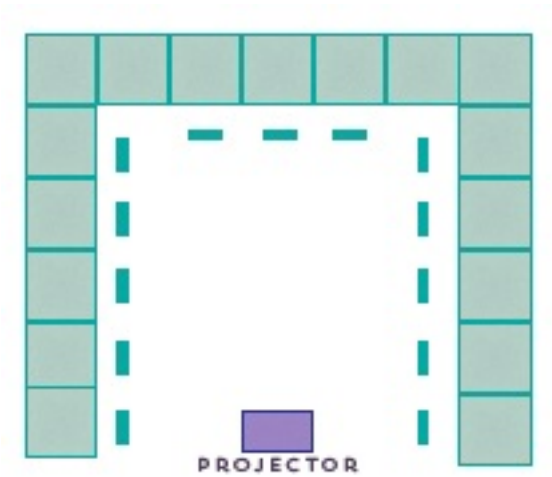
## MATERIALS

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- Projector

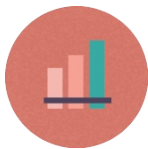
- Idea Journals
- Computers (class set)
- Pencils (class set)

# Ideal Desk Setup



## Resources

[Powerpoint: Lesson 4](#)



# DO NOW



Length: 5 minutes

Prep:

- Computers
- Idea Journals
- Pencils

Teacher Actions	Student Actions
<div>1</div> <p>Circulate room to assist students in logging-in to their Scratch accounts</p> <ul style="list-style-type: none"><li>• If necessary, review the computer usage expectations.</li></ul>	<div>1</div> <p>Students log-in to their Scratch accounts.</p>



## CODE ALONG: IF YOU GIVE A MOUSE A COOKIE



Length: 15 minutes

Students code along with the teacher for 15 minutes. Stop the activity at 15 minutes to ensure time for individual coding with the Dance Off activity.

Prep:

- Computers
- Plan Chart
- "If You Give a Mouse a Cookie" book or audiobook Use [this](#) Scratch Project for student code along.

Teacher Actions	Student Actions
<p><b>1</b> Read "If You Give a Mouse a Cookie" to students (3 min)</p>	<p><b>1</b> Students sit facing teacher, computers closed.</p>
<p><b>2</b> Show the step by step plan (2 min) *Ask students to identify connection between a step and what happened in the story.</p> <p>Mouse Will:</p> <ol style="list-style-type: none"> <li>1. Ask for a glass of milk</li> <li>2. Go to Milk</li> </ol>	<p><b>2</b> Students identify that:</p> <ul style="list-style-type: none"> <li>• Steps 1 &amp; 2 are "... it's going to want a glass of milk."</li> <li>• Steps 2 &amp; 3 are "... it's going to ask for a straw."</li> </ul>



3. Ask for a straw
4. Go to straw
5. Ask for a napkin
6. Go to napkin
7. Look in the mirror
8. Go to mirror
9. Ask for a pair of scissors
10. Go to scissors

Code Along (10 min)

- Setup
  - Navigate to "My Classes", "Exploring Scratch" studio, and open project "If You Give a Mouse a Cookie"
  - Click the green flag to show that the project doesn't do anything yet... we need to code it!
  - Click "See Inside"
  - Click "Remix"
  - Re-title your work
- Coding

- Steps 3 & 4 are "...it's going to ask for a napkin."
- Steps 5 & 6 are "...it's going to ask for a straw."  
Continue until you feel students understand the sequence.

- The events block indicates when the sequence should begin:

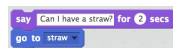


- Code the first 2 steps of the plan:

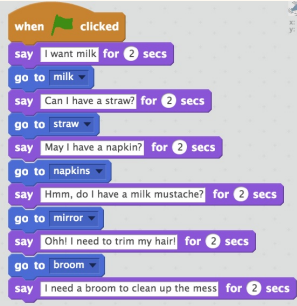


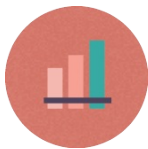
- Pause to run the program and check it is making sense

- What do you think the next two blocks will be?



- Continue to code and pause to check after every 1-2 lines you add. Check off the plan as you go through it. Every time you re-run it you will need to move the mouse

<p>back to its starting point.</p>	
<p>3 Check student work.</p>	<p>3 Students turn to their computers and follow the steps in the code along, giving thumbs up when ready for a next step.</p> <ul style="list-style-type: none"><li>• Remind students to:<ul style="list-style-type: none"><li>◦ Code the correct sprite</li><li>◦ Choose the “say for 2 sec” block</li><li>◦ Move the mouse back to its starting point before re-running the code</li></ul></li></ul> <p>Finished program:</p>  A screenshot of a Scratch script. It starts with a 'when clicked' block, followed by a series of 'say' blocks and 'go to' blocks. The sequence is: 'say I want milk for 2 secs', 'go to milk', 'say Can I have a straw? for 2 secs', 'go to straw', 'say May I have a napkin? for 2 secs', 'go to napkins', 'say Hmm, do I have a milk mustache? for 2 secs', 'go to mirror', 'say Ohh! I need to trim my hair! for 2 secs', 'go to broom', and 'say I need a broom to clean up the mess for 2 secs'.



# CODE ALONG: CHOREOGRAPH A DANCE!



Length: 25 minutes


Students code along with the teacher until they are ready to plan, code, and validate their dance off code.

Prep:

- Idea Journals
- Computers
- Pencils

Teacher Actions	Student Actions
<div>1</div> <div>Plan 3 step dance (5 min)</div> <div><ul style="list-style-type: none"><li>• Introduce activity: “We are going to choreograph a dance for our Sprite.”</li><li>• Pick 5 dance moves for our sprite to execute (prioritize using the highlighted blocks):<ul style="list-style-type: none"><li>◦ Say</li><li>◦ Move</li><li>◦ Turn</li><li>◦ Think</li><li>◦ Change size</li></ul></li></ul></div>	<div>1</div> <div>Students volunteer 5 dance moves from the list to choreograph their dance.</div>

<ul style="list-style-type: none"> <li>◦ Change color</li> <li>◦ Next costume</li> <li>• Write out the 5 dance moves in order on your planning chart</li> </ul>	
<p><b>2</b> Code Along (10 min)</p> <ul style="list-style-type: none"> <li>• Setup           <ul style="list-style-type: none"> <li>◦ Navigate to "My Classes", "Exploring Scratch" studio, and open project "Dance Off"</li> <li>◦ Click the green flag to show that the project doesn't do anything yet... we need to code it!</li> <li>◦ Click "See Inside"</li> <li>◦ Click "Remix"</li> <li>◦ Re-title your work</li> </ul> </li> </ul> <p>Code</p>	<p><b>2</b> Students follow along on their computers as they code the dance for the first sprite.</p>

<div><ul style="list-style-type: none"><li>• We will begin when the green flagged is clicked: </li><li>• Drag coding blocks to represent the 3 actions and test code by pressing the green flag</li></ul><p>Adjust</p><ul style="list-style-type: none"><li>• Play with what happens when you change numbers in each block. After each adjustment run the code gain to see how it affected the dance.</li></ul><p>Repeat</p><ul style="list-style-type: none"><li>• Copy and paste the blocks using the stamp tool so that it repeats the actions multiple times.</li></ul></div>	
<div><div>3</div><div>Students plan and code dances for Khalid (10 min)</div></div>	<div><div>3</div><div>Students plan in their idea journals their dance.</div></div>

<ul style="list-style-type: none"> <li>• (2 min) In idea journals have students write out their 5 step dances using the given blocks</li> <li>• (8 min) Students delete the code we have and create their own</li> </ul>	
<p><b>4</b> Share dances (5 min)</p> <ul style="list-style-type: none"> <li>• Click "Share"</li> <li>• Click "Studios" under your project</li> <li>• Click the check mark next to "Dance Off"</li> </ul>	<p><b>4</b> Students put their projects into the shared studio</p>
<p><b>5</b> Go over norms for viewing peer's work</p> <ul style="list-style-type: none"> <li>• Constructive Feedback: "It would be cool if..."</li> <li>• Positive Speak: Tell someone what you like about their program before giving any constructive feedback</li> </ul>	<p><b>5</b> Students read norms and share additional norms they would like their peers to adhere to.</p>

<ul style="list-style-type: none"><li>• No negative comments</li></ul>	
<div>6</div> <p>Students view their peer's work</p> <ul style="list-style-type: none"><li>• Click "Dance Off" to view everyone's dances</li></ul>	<div>6</div> <p>Students browse each other's projects in the studio.</p>





# EXTENSION ACTIVITY



Length: 15 minutes

If you have an 60 minute block for class, try this extension activity.

Prep:

- Computers

Teacher Actions	Student Actions
<div>1</div> Students can continue to improve upon their dances	<div>1</div> Lab time
<div>2</div> Or students navigate back to the "Explore Scratch" studio and attempt to solve the 3 challenge projects	