

# UNIT 2, LESSON 2

## COCO LEVEL 3, LOOK BLOCKS

3RD & 4TH GRADE



Lesson created by the GMU-ODU CSforAll Team. For more information about this lesson and our CSforAll initiative, contact Dr. Amy Hutchison at [ahutchison1@ua.edu](mailto:ahutchison1@ua.edu)

## SUMMARY AND STANDARDS

### Summary:

In this lesson, students will use the CoCo graphic organizer to begin animating a set of instructions in Scratch.

#### 2017 VDOE ELA Standards

The student will use effective communication skills in a variety of settings.

- a) Use active listening strategies including but not limited to making eye contact, facing the speaker, asking questions, and summarizing.
- b) Orally summarize information expressing ideas clearly.

The student will read and demonstrate comprehension of nonfiction texts

The student will write in a variety of forms to include narrative, descriptive, opinion, and expository

#### CS Standards:

The student will construct sets of step-by-step instructions (algorithms), both independently and collaboratively

- a) using sequencing;
- b) using events.

Today, we are moving on to Unit 2, where we will learn about something called abstraction, a key process you will use in both computer science and writing.

## MATERIALS AND RESOURCES NEEDED FOR THIS LESSON:

- Personal Computer
- Access to the Internet
- Teacher slide deck
- [Student Unit 2 Slide Deck](#)
- Your written instructions (in the sequencing graphic organizer) from last time
- [Coco Link](#)
- [Scratch link](#)



### Reminder:

In this lesson, every student should be **assigned a story in CoCo using Level 3.**

The story should be titled **“Unit 2 Story.”**

Each student should save their work using this naming strategy: **“Student Name + Unit # + Descriptor”**, for example, **“Johnny Unit 2 Story”**

You will need....[read slide]

## WRITING IN COCO: ADDING TEXT TO COCO

Steps:

1. Log In to CoCo
2. Select “level 3” from the drop-down menu
3. Type your instructions from the last lesson into the text boxes provided.



**COCO**  
COMPOSE & CODE

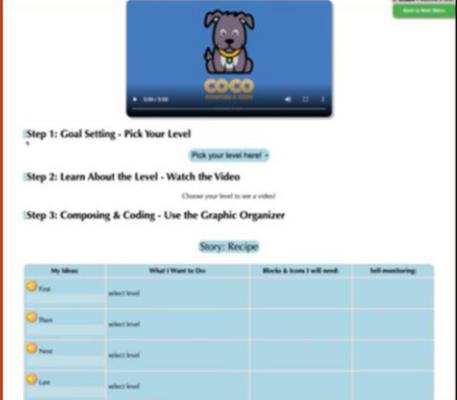
DEPICT-CS

In a moment, we will log into CoCo level 3.

We already know how to do this but, as a reminder, here are the steps (read slide)

# VIDEO MODEL

[Coco Level 3, column 1 tutorial](#)



Step 1: Goal Setting - Pick Your Level  
[Pick your level here!](#)

Step 2: Learn About the Level - Watch the Video  
Choose your level to see a video!

Step 3: Composing & Coding - Use the Graphic Organizer

[Story: Recipe](#)

My ideas	What I Want to Do	Blocks & Items I will need	Self-monitoring
	select level		
	select level		
	select level		
	select level		

Use this video to explain how to put instructions into the first column of CoCo

## LEVEL 3 IN COCO

Do I need to add a start block?

Do I need to add a character or object?

Do I need to add or change a background?

Do I need to make my character talk?

Do I need to make my character think something?

Do I need to create a costume?

Do I need to switch a costume?

Do I need my character or object move?

Do I need my character or object to turn and then move?



Story: Level 3 Story

What I Want to Do:

Do I need to add a start block?	No	Yes
Do I need to add a character or object?	No	Yes
Do I need to add or change a background?	No	Yes
Do I need to make my character talk?	No	Yes
Do I need to add or change a background?	No	Yes
Do I need to make my character talk?	No	Yes
Do I need to make my character think something?	No	Yes
Do I need to create a costume?	No	Yes
Do I need to add or change a background?	No	Yes
Do I need to make my character talk?	No	Yes
Do I need to make my character think something?	No	Yes
Do I need to create a costume?	No	Yes
Do I need to add or change a background?	No	Yes
Do I need to make my character talk?	No	Yes
Do I need to make my character think something?	No	Yes
Do I need to create a costume?	No	Yes
Do I need to make my character think something?	No	Yes
Do I need to create a costume?	No	Yes
Do I need to switch a costume?	No	Yes
Do I need my character or object move?	No	Yes

Before we get started, let's take a quick look at the level 3 features in CoCo. In level 3 of Coco, you will be introduced to some new ways to use Scratch to animate your explanatory writing. Let's look at these new questions together. Remember, you will always need to add a start block or your code will not work!

[Link to the Video](#)

# VIDEO OF HOW TO HOVER OVER THE BLOCKS AND SEE WHAT THEY DO.

Play this video to explain that students can see what the blocks do by hovering over the block and playing the linked video.

# MODELING COCO



## Steps:

1. Log In to CoCo
2. Select "level 3" from the drop-down menu
3. Type your instructions from the last lesson in the text boxes provided

How to \_\_\_\_\_  
Fill in the boxes below with your instructions for how to do something.

**My topic:** Introduce the reader to your topic.

**First,**  
First,

**Then,** list the first step in your process.  
Then,

**Next,** list the next step in your process.  
Next,

**Last,** list the last step in your process.  
Last,

Finally,



My Ideas:	
<b>1</b> First First, get all your materials. You will need - list your materials here.	<b>1</b> Do I ne <b>1</b> Do I ne <b>1</b> Do I ne backgroun <b>1</b> Do I ne
<b>2</b> Then Then, list the first step in your process.	backgroun <b>1</b> Do I ne <b>1</b> Do I ne something! <b>1</b> Do I ne <b>1</b> Do I ne
<b>3</b> Next Next, list the next step in your process.	backgroun <b>1</b> Do I ne <b>1</b> Do I ne something! <b>1</b> Do I ne <b>1</b> Do I ne
<b>4</b> Last Last, list the last step in your process.	<b>1</b> Do I ne backgroun <b>1</b> Do I ne <b>1</b> Do I ne something! <b>1</b> Do I ne



Make  
sure you  
are using  
CoCo!

**COCO**  
COMPOSE & CODE  
DEPICT-CS

**PAUSE TO WORK IN COCO**

# LOOK BLOCKS

Do I need to hide my character?

Do I need to show my character?

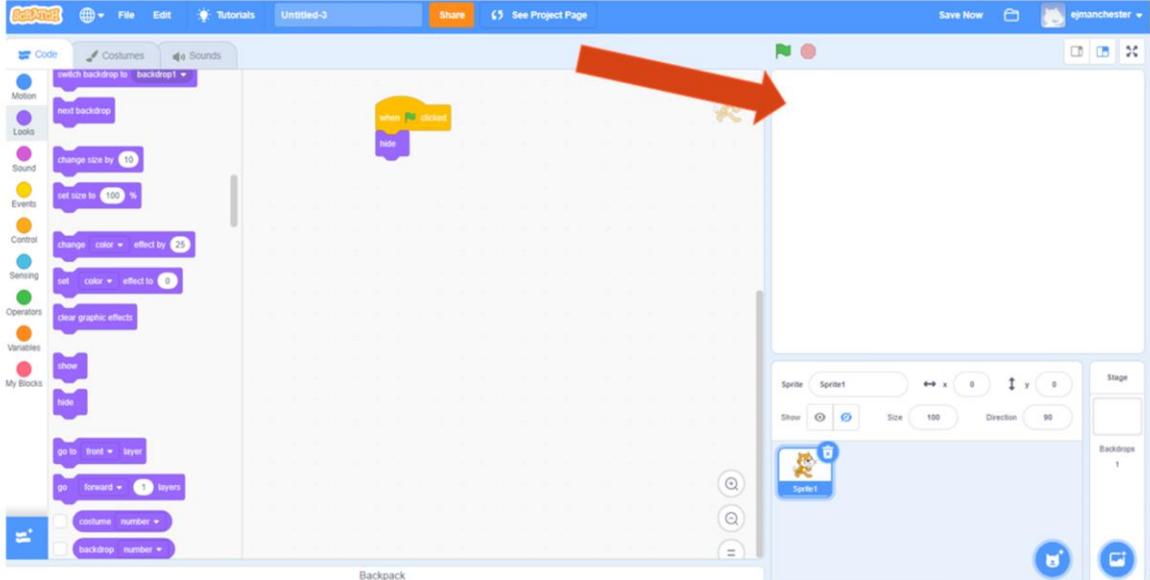
Do I need my character to appear in a particular size?

Do I need to change the color of my character?

In CoCo, you may see that there are questions about what you want your sprite to do. Some of these questions are about how you want your sprite to look. Today we are going to learn how some of these blocks work so you will be ready to use them in a future lesson.

These all have to do with the appearance or look of your sprite, so they are the purple look blocks. Let's learn how they work....

**HIDE CHARACTER BLOCK (VIDEO)**

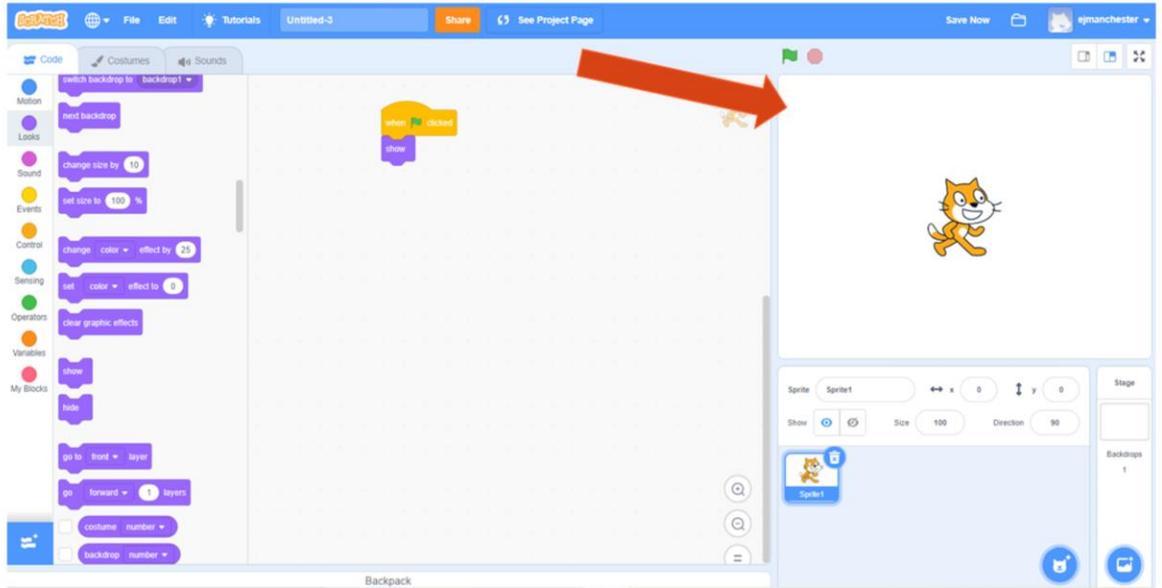


The screenshot shows the Scratch code editor interface. On the left, the 'Code' tab is active, displaying a script with several blocks: 'switch backdrop to: backdrop 1', 'next backdrop', 'change size by: 10', 'set size to: 100 %', 'change color effect by: 25', 'set color effect to: 0', 'clear graphic effects', 'show', 'hide', 'go to front layer', and 'go forward 1 layers'. A red arrow points to a 'hide' block being added to the script. The 'Stage' area on the right shows a 'Sprite' panel with 'Sprite1' selected and a 'Backdrops' panel with 'Backdrops 1' selected. The 'hide' block is currently hidden from view.

Hides your sprite from view.

Play Video by clicking on “Explainer Video” on the slide.

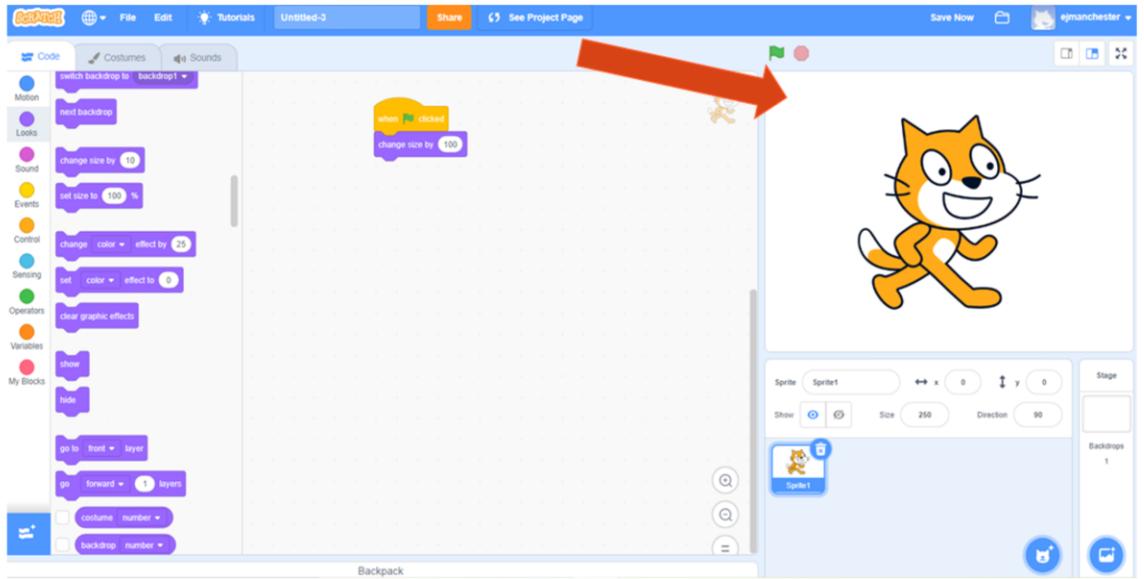
**SHOW CHARACTER BLOCK (EXPLAINER VIDEO)**



Makes your sprite visible.

Play Video by clicking on "Explainer Video" on the slide.

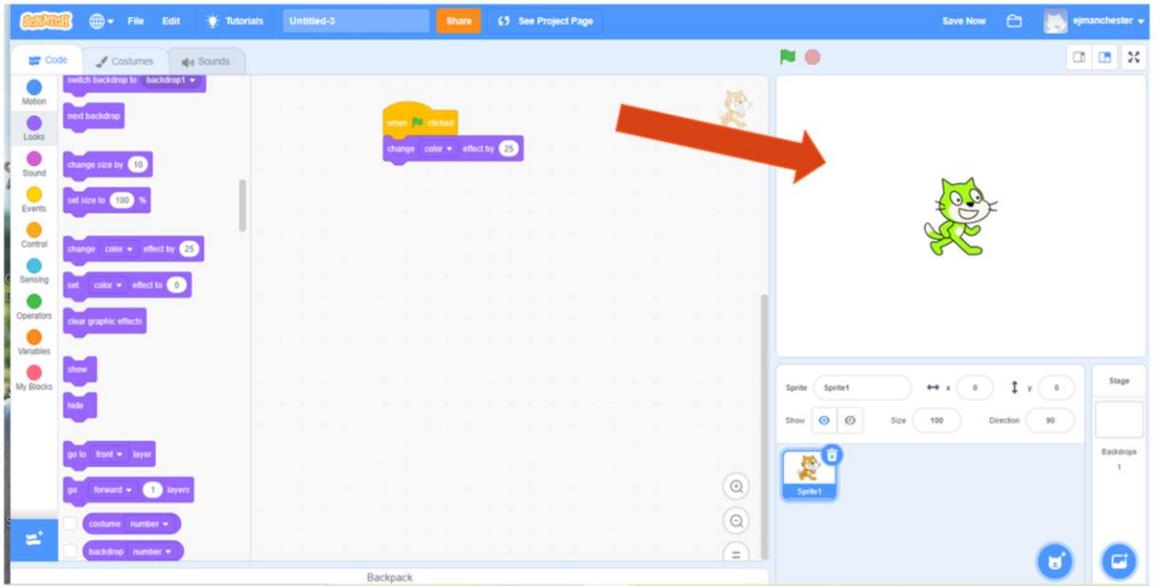
**CHANGE SIZE (EXPLAINER VIDEO)**



Changes the size of your sprite.

Play Video by clicking on “Explainer Video” on the slide.

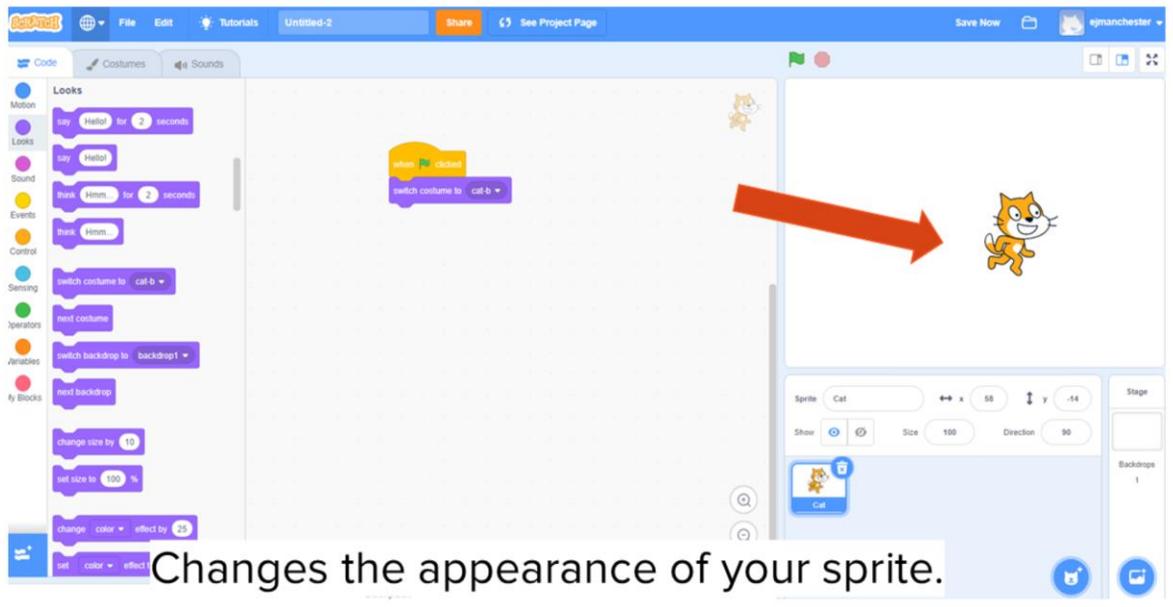
**CHANGE COLOR (EXPLAINER VIDEO)**



Changes the color of your sprite.

Play Video by clicking on "Explainer Video" on the slide.

## REMEMBER: SWITCH COSTUME BLOCK (EXPLAINER VIDEO)



Changes the appearance of your sprite.

If needed, remind students they learned how to switch their sprite's costume in U1L2.

Play Video, and explain: It may not be obvious but this cat looks different from the one automatically in scratch. This one looks like it's running. The "change costume" block in Scratch changes the appearance of your sprite. You can use it to change the appearance of your sprite. This block makes things simpler because we want have to use as many sprites in our project.

Video link:

[https://www.dropbox.com/s/jdt70o0l0neyk8c/SwitchCostumeCoCo\\_Nov16.mp4?dl=0](https://www.dropbox.com/s/jdt70o0l0neyk8c/SwitchCostumeCoCo_Nov16.mp4?dl=0)

## CODE AN ANIMATION OF A WORD

Steps:

1. Choose your backdrop
2. Remove the cat sprite
3. Add the letters of your initials, word, or name—one sprite per letter!
4. Pick a sound and look block for each letter
5. Challenge: change the pitch effect on at least ONE of your letters

Optional tutorial video: <https://scratch.mit.edu/projects/editor/?tutorial=name>

**WRAP UP:  
ANY VOLUNTEERS TO SHARE THEIR ANIMATIONS?**

Review concepts from today and ask for volunteers to share their work.