

# UNIT 2, LESSON 2

## COCO LEVEL 3, LOOK BLOCKS

5TH & 6TH 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 write for a variety of purposes.  
d) Use strategies for organization of information and elaboration according to the type of writing.

### 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 into the text boxes provided.



**CO CO**  
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)

# VIDEOMODEL

[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 & Icons I will need	Self-monitoring
First	select level		
Then	select level		
Next	select level		
Last	select level		

# MODELING COCO

Steps:

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



My Ideas:	
<b>First</b> First, get all your materials. You will need - list your materials here.	Do I ne Do I ne Do I ne backgrou Do I ne
<b>Then</b> Then, list the first step in your process.	backgrou Do I ne Do I ne somethingi Do I ne Do I ne
<b>Next</b> Next, list the next step in your process.	backgrou Do I ne Do I ne somethingi Do I ne Do I ne
<b>Last</b> Last, list the last step in your process.	Do I ne backgrou Do I ne Do I ne somethingi 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?

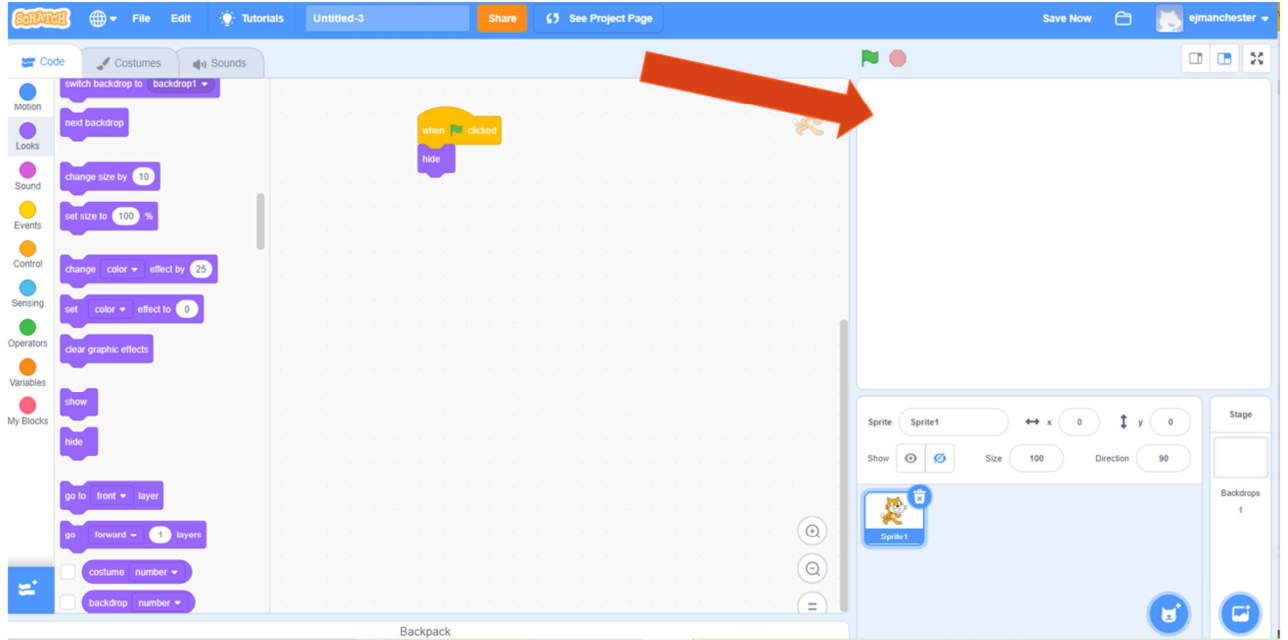
Do I need to change the color of my character?

The next few questions you see in Coco as {read questions}

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....



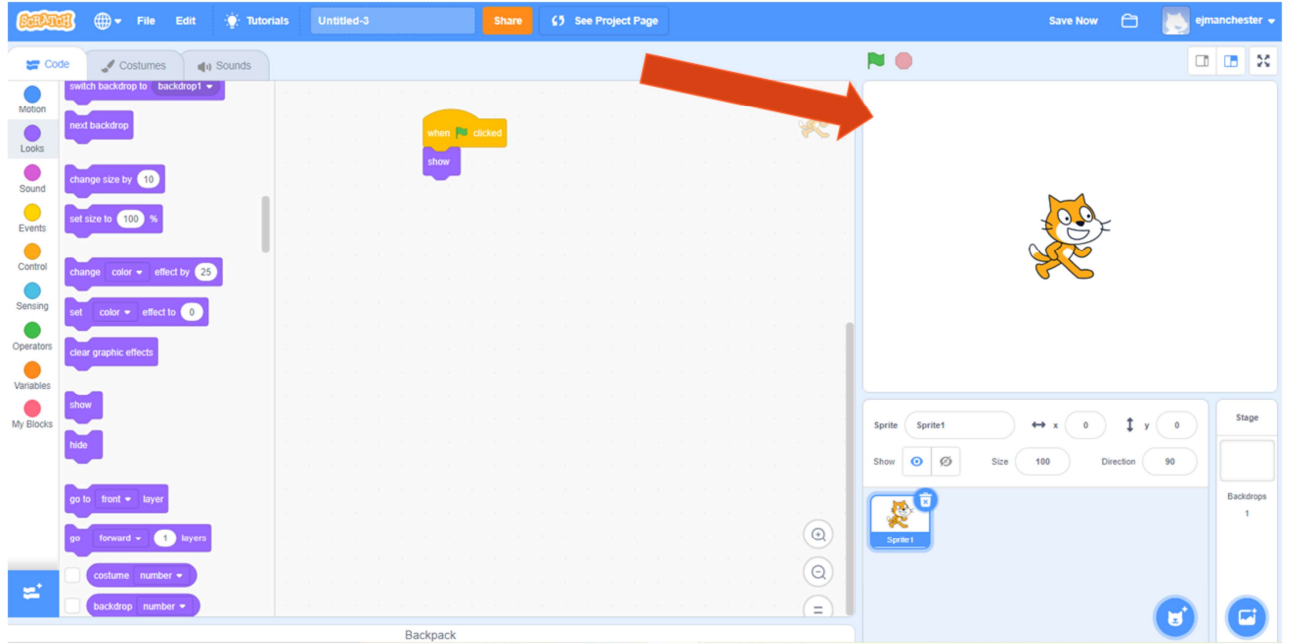
**HIDE CHARACTER BLOCK (EXPLAINER VIDEO)**



Hides your sprite from view.

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

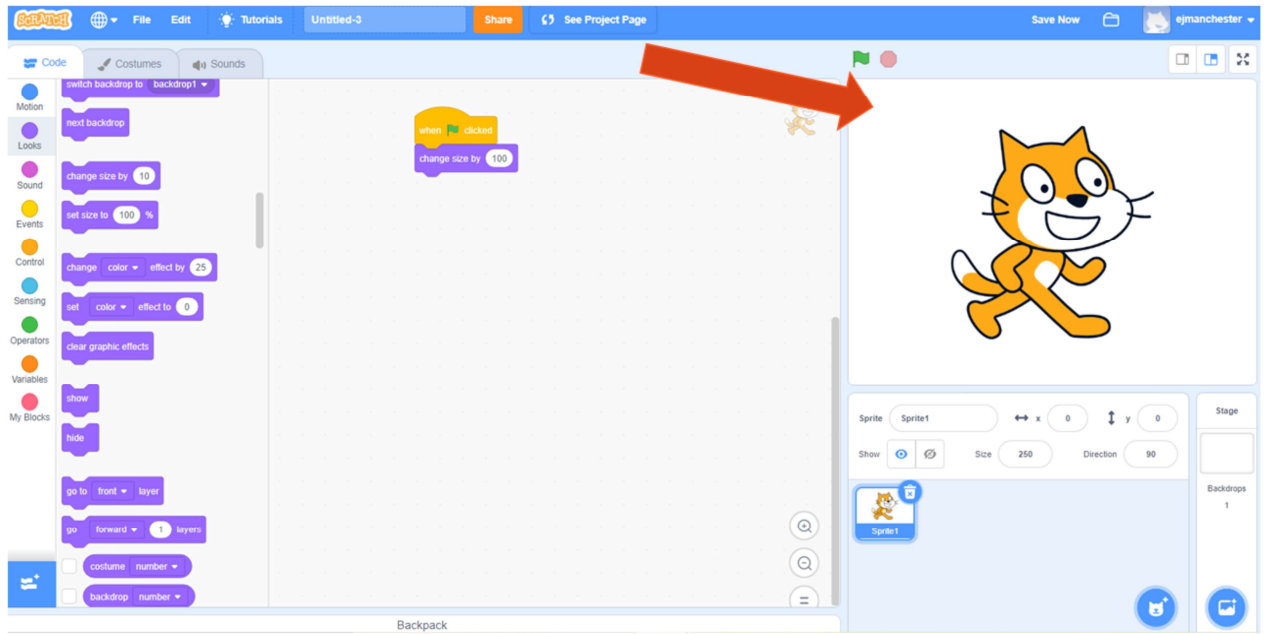
**SHOW CHARACTER BLOCK (EXPLAINER VIDEO)**



Makes your sprite visible.

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

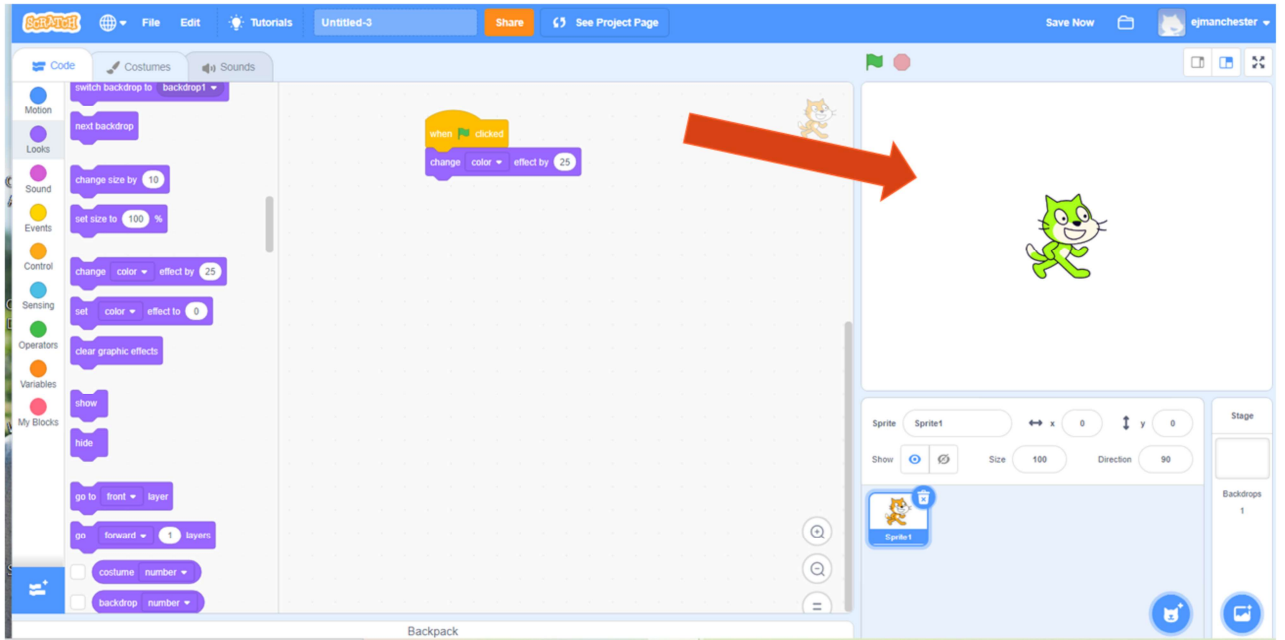
**CHANGE SIZE (EXPLAINER VIDEO)**



Changes the size of your sprite.

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

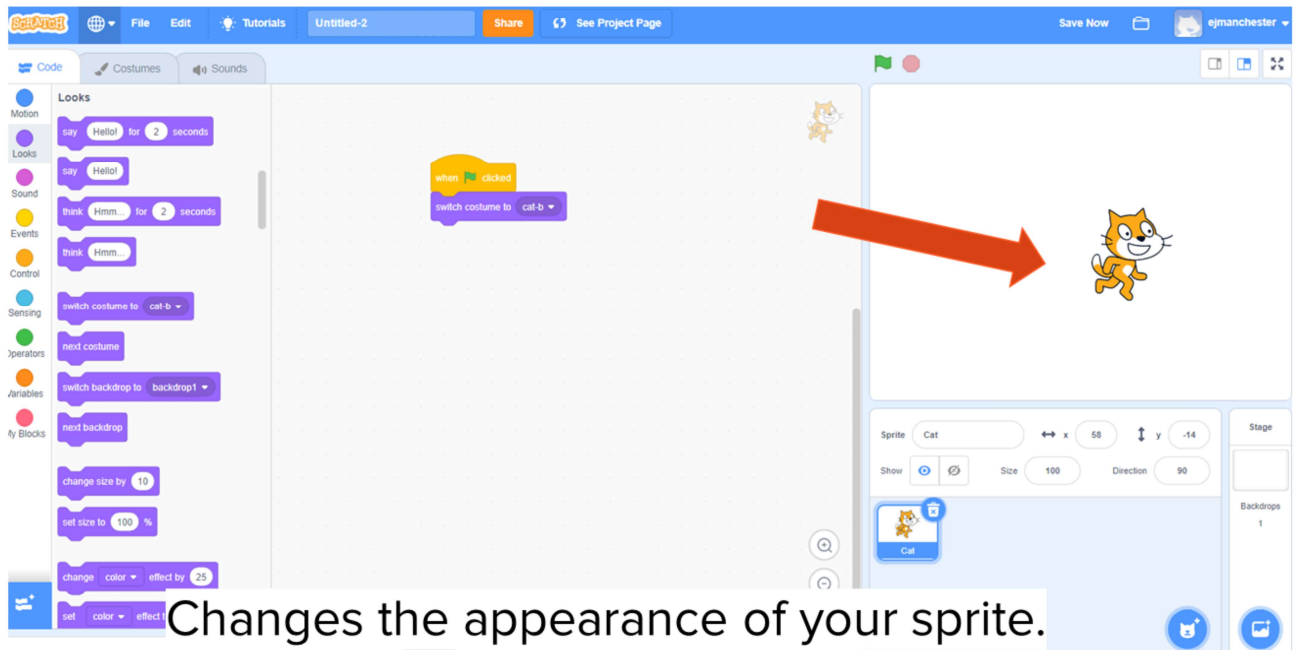
**CHANGE COLOR (EXPLAINER VIDEO)**



Changes the color of your sprite.

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

## REMEMBER: SWITCH COSTUME BLOCK (EXPLAINER VIDEO)



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)

## REMEMBER: YOU CAN CHANGE BY MULTIPLE EFFECTS!



→ Change color effect



→ Change fisheye effect



→ Change whirl effect



→ Change pixelate effect



→ Change mosaic effect



→ Change brightness effect



→ Change ghost effect

If needed, remind students they learned how to switch their sprite's visual effect in U1L4.

There are many ways we can use this effect. For each of these, the number corresponds to the lowest intensity of each effect. And there are 7 effects to choose from!

- Color changes the color.
- Fisheye warps the sprite to look like this (point to screenshot)
- Whirl warps the sprite another way.
- Pixelate makes the sprite look like a video game character.
- Mosaic multiples the sprite
- Brightness changes the brightness
- Ghost

## 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>

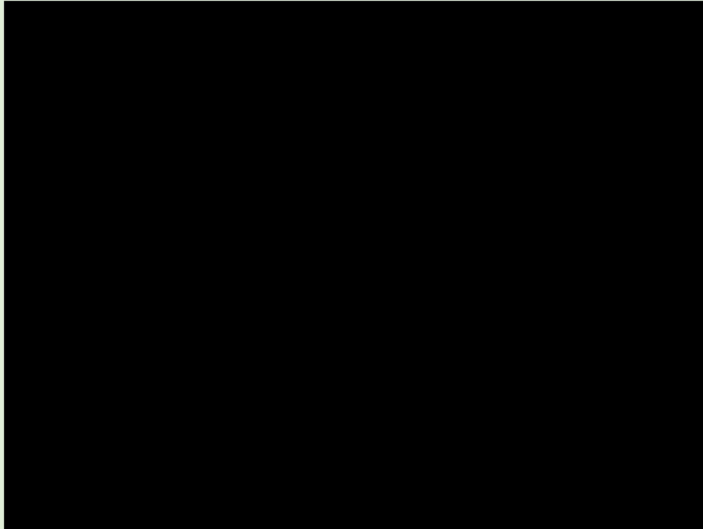
**ANY VOLUNTEERS TO SHARE THEIR ANIMATIONS?**



# **OPTIONAL “CHANGE SIZE” ACTIVITY**

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## CHANGE SIZE



1. Play the video on the left by right-clicking the link and pasting it into your browser.
2. Go to the next slide
3. Place the blocks under the green flag in the correct order by moving them from left to right.
4. Once the code matches the video, you are done!
5. You can check your answer by seeing the solution image or clicking the solution link.

## Mixed Code

```
say Here it is! for 2 seconds
```

```
change size by 50
```

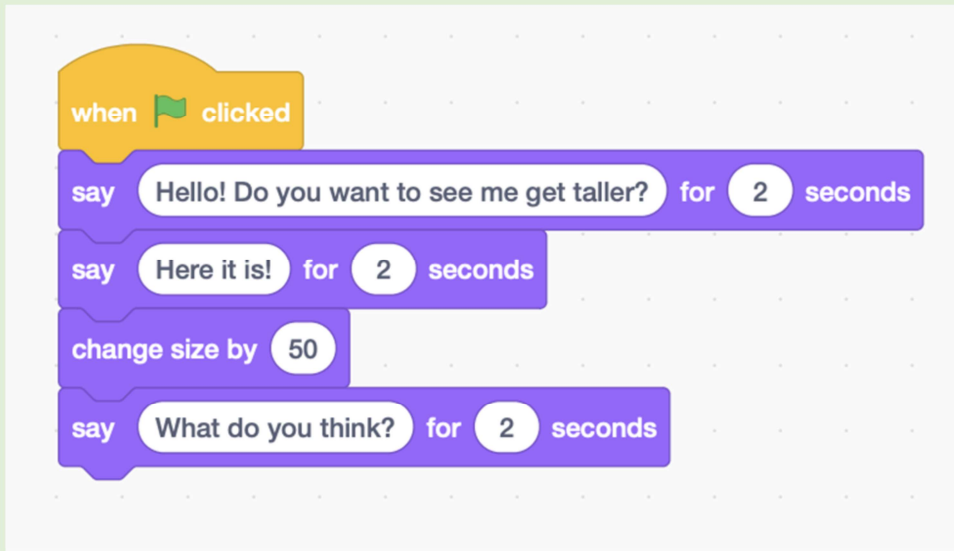
```
say What do you think? for 2 seconds
```

## Your Answer

```
when clicked
```

```
say Hello! Do you want to see me get taller? for 2 seconds
```

## CHANGE SIZE - POSSIBLE SOLUTION



```
when green flag clicked
say Hello! Do you want to see me get taller? for 2 seconds
say Here it is! for 2 seconds
change size by 50
say What do you think? for 2 seconds
```

The image shows a Scratch script on a light green background. The script starts with a yellow 'when green flag clicked' block. This is followed by four purple 'say' blocks: 'Hello! Do you want to see me get taller?' for 2 seconds, 'Here it is!' for 2 seconds, 'change size by 50', and 'What do you think?' for 2 seconds. The 'change size by 50' block is shorter than the others, indicating it is a 'change size by' block.