**Lesson created by the GMU-ODU CSforAll Team. For more information about**

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| **Unit 2 Lesson 3: Planning and Writing with CoCo Level 3** *3rd & 4th Grade* | | |
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| **Concept: Abstraction** | | |
| **Vocab:**   * (specific to CoCo)   + Self-monitoring block   + Self-evaluation * (specific to Scratch)   + Green flag   + Move block   + Sprite   + Backdrop | | |
| **Narrative/Summary:**  In this lesson, students will use Coco, the graphic organizer, to code an animation in Scratch of their instructional writing. | | |
| **Lesson Objectives (learning targets): I can…**   * Review CoCo Level 3 features and Scratch * Plan for the animation of your writing in Coco Level 3 (Column 2, 3) * Review your plan and self-monitor (Column 4) * Play your animation in Scratch for a peer and make suggested modifications | | |
| **ELA Standard(s)** | **Computer Science Standard(s)** | |
| The student will continue to read and demonstrate comprehension of nonfiction texts  The student will write for a variety of purposes:   * Use strategies for organization of information and elaboration according to the type of writing.   The student will use available technology for reading and writing. | The student will construct sets of step-by-step instructions (algorithms), both independently and collaboratively  a) using sequencing;  b) using events.  The student will break down (decompose) a  larger problem into smaller subproblems,  independently or collaboratively. | |

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| **Materials** |
| **Lesson materials:**   * Personal Computer * Access to the Internet * CoCo level 3, with column one filled in * [Teacher slide deck](https://www.dropbox.com/scl/fi/qaanrrldpce8rvo2v7lzm/U2L3.pptx?rlkey=5o59zsvld1x8lcc2y059r6ekx&dl=0) * [Coco Link](https://wego.gmu.edu/scratchgo/login.php) * [Scratch link](https://scratch.mit.edu/) * Storyboard planning document: <https://www.dropbox.com/scl/fi/cf221k7jgnykr64xgipjj/U2L3_Storyboard-for-Scratch-Animation.docx?dl=0&rlkey=pmr35yob9hq9827524j4oml59>   **Supplemental resources:** |

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| **Lesson Structure and Activities** |
| ***In the previous lesson, students should have begun working in Level 3 of CoCo on the “Unit 2 Story” assignment. Please make sure all students still have access to this story and have saved their work so that column 1 is filled in.***  ***Students should use the same naming strategy for their final Scratch Project:***   * + *“Student Name + Unit # + Descriptor”, for example, “Johnny Unit 2 Story”*   **Warm-up (2 min):**  **NOTE: Many slides for this lesson are scripted so that, if needed, you can see exact definitions and instructions for teaching this lesson in the notes at the bottom of the teacher slide deck.**   * (Optional) Read aloud the summary and standards as well as the materials and resources needed for this lesson (slides 2-3). |
| **Guided Instruction & Independent Work (25-30 minutes):**  Students finish adding writing into CoCo:   * Instruct students to open Coco and Scratch in two separate tabs (Slides 4-5). * Review the new features of CoCo level 3 (slide 6). * Model how to choose Scratch blocks and complete the self-monitoring column in CoCo level three (slide 7). We suggest playing this [video model](https://www.dropbox.com/s/wzd4q7ntm73lk7w/Level%203%20of%20Coco%20and%20Scratch%20%282%20min%29.mp4?dl=0), which is embedded in Slide 7 and also explains how to use Row 1 of CoCo to begin working in Scratch once students have finished with the planning process. * Remind students that their writing should already be correctly added to CoCo (slide 8).   Students plan animation:   * After confirming that they’ve added their text, instruct students to fill in the [planning document for their Scratch animation](https://www.dropbox.com/scl/fi/cf221k7jgnykr64xgipjj/U2L3_Storyboard-for-Scratch-Animation.docx?dl=0&rlkey=pmr35yob9hq9827524j4oml59) (slides 9-13). * Next, students should complete columns 2 & 3 in CoCo to select their Scratch blocks (slide 14).   Consistency Between Scratch and CoCo: slides 15-19   * Before having students move into Scratch, remind students that their animations in Scratch should match what they have planned and that they should include a topic sentence. (From Unit 1 ). * Let students know that Scratch can also be used to **enhance** or improve their final product and, while their message needs to be clear they may look for ways to improve the animation.   + Show example of an enhanced animation in Scratch and explain that it used relevant details to make the animation more engaging. (Slide 17) * Finally, let students know that adding **too much** or **unrelated** items in Scratch can be very distracting for their audience. Remind students they should not add things in Scratch that will make their animation less clear or confusing. (slide 18)   + Show non-example of distracting items in Scratch animations. (Slide 19)   Students work in Scratch and CoCo: slides 20-23   * Students can now begin working directly in Scratch using columns 2-4 in CoCo as a guide (slide 20). * *Optional slide 21 :* students who would benefit from a more scaffolded learning experience may follow these instructions instead.   + [Model](https://www.dropbox.com/s/fdpn9no5gvtaj0t/Step%202_%20Add%20Backdrop%20and%20Sprite.webm?dl=0) how to add a back drop, sprite, and other information from first row of CoCo   + Provide students with time to add content from the first row of CoCo to Scratch   + [Model](https://www.dropbox.com/s/fdpn9no5gvtaj0t/Step%202_%20Add%20Backdrop%20and%20Sprite.webm?dl=0) how to transfer the remaining content from CoCo to Scratch and use the self-monitoring column. * [Model](https://www.dropbox.com/s/wf1o5z2qv0yx08h/Step%204.webm?dl=0) how students can evaluate their work in CoCo (Slides 22-23). * Instruct students to complete the self-evaluation in CoCo. |
| **Wrap up (5-10 minutes):**   * Instruct students to share their animation with a partner and share one thing they may have wanted to do differently (Slide 24) * Give students at least 5 minutes to begin modifying their animations based on feedback from their partner (slide 25)   IMPORTANT! Remind students to share the .sb3 file from CS First to CoCo (Slide 26) |
| **Assessment Strategy:**  Did the student…   * Review CoCo Level 3 features and Scratch * Plan for the animation of writing in Coco Level 3 (Column 2, 3) * Review plan and self-monitor (Column 4) * Play animation in Scratch for a peer and make suggested modifications |