

**Lesson created by the GMU-ODU CSforAll Team. For more information about this lesson and our CSforAll initiative, contact Dr. Amy Hutchison at** [achutchison1@ua.edu](mailto:achutchison1@ua.edu)

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| **Lesson 3: Planning & Writing (45-50 min)**  *Grades 3-4* |

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| **Concept:** | |
| **Vocabulary:**   * Explanatory writing | |
| **Summary:**  In this lesson, students will be introduced to explanatory writing. They will use CoCo to write an original recipe and begin planning how to animate their writing using Scratch. | |
| **Lesson Objectives (learning targets): I can…**   * Review familiar Scratch blocks and Computer Science (CS) vocabulary * Identify the purpose and features of explanatory writing * Understand CoCo level 4 * Write a recipe using First, Then, Next, Last, Finally transition words * Add my writing to CoCo * Begin planning my animation | |
| **Content Standard(s)** | **Computer Science Standard(s)** |
| The student will:   * Use organizational strategies to structure writing according to type * Use transition words to vary sentence structure | The student will construct sets of step-by-step instructions (algorithms), both independently and collaboratively  a) using sequencing;  b) using events. |

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| **Materials** |
| **Lesson materials:**   * Chromebook/Laptop * Internet Access * Scratch Offline Editor (app) * Teacher slides * CoCo Link * Optional lemonade/Koolaid recipe graphic organizer: <https://www.dropbox.com/scl/fi/gr6kvzfrccgeu0zecfyuk/Lemonade-or-Koolaid-recipe.docx?dl=0&rlkey=5sawf7zzyvoovr7p75qi79ka4> * Hard copies of the Scratch storyboard/planning document: <https://www.dropbox.com/scl/fi/s22kuh51cngvm6b0s991d/Storyboard-for-Scratch-Animation.docx?dl=0&rlkey=4oogl2vwb6mcixdpzed77wu8h>   **Supplemental resources:** |

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| **Lesson Structure and Activities** |
| **(10 min) Warm-up & Introduction:**  **NOTE: All 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: Introduce lesson, learning goals, and resources (Slides 2-5) * Review Scratch blocks with a scavenger hunt (slides 6-13) * Review vocabulary with matching activity (slides 16-17) * Check off lesson objectives as the lesson proceeds (slide 18, etc.) |
| **(10 min) Direct Instruction & Guided Practice:**  Introduce Explanatory Writing   * Define explanatory writing (slide 20) * Introduce transition words: First, then, next, last, finally (slide 21) * Brainstorm types of explanatory writing with the class (slide 22) * Describe the process for writing an explanatory text (slide 23) * Remind students that CoCo is a graphic organizer that helps with the writing process (slide 24) and that both coded algorithms and written instructions must be in the correct sequence (slide 25) |
| **(25 min) Independent Practice:**  Writing a recipe   * Instruct students to write a recipe for making a beverage. Students may choose any drink they like, and can use the recipe template provided or jump straight into CoCo column one.   + The template can be found at: <https://www.dropbox.com/scl/fi/gr6kvzfrccgeu0zecfyuk/Lemonade-or-Koolaid-recipe.docx?dl=0&rlkey=5sawf7zzyvoovr7p75qi79ka4> * Remind students to select level four from the drop down menu (slide 31)   Adding writing to CoCo   * Any students who used the template should use this time to transfer their writing to CoCo.   Planning an animation   * Remind students of CoCo’s four columns and their purposes (slide 36) * Distribute a physical copy of the [Scratch storyboard/planning document](https://www.dropbox.com/scl/fi/s22kuh51cngvm6b0s991d/Storyboard-for-Scratch-Animation.docx?dl=0&rlkey=4oogl2vwb6mcixdpzed77wu8h) to all students (slide 37) and instruct them to use it to plan out their animation.   Optional support videos:   * Overview of CoCo: <https://www.dropbox.com/s/2lsly3hgelvw3hg/Review%20of%20level%204.webm?dl=0> * Adding text to CoCo: <https://www.dropbox.com/s/h0yeiv8ckvghmjk/Adding%20Our%20Text%20to%20Coco.webm?dl=0> |
| **(5 min) Wrap up:**   * Remind students of five computational thinking skills and ask which is their favorite (slide 39) |
| **Assessment Strategy:**  Did the student…   * Review familiar Scratch blocks and Computer Science (CS) vocabulary * Identify the purpose and features of explanatory writing * Understand CoCo level 4 * Write a recipe using First, Then, Next, Last, Finally transition words * Add my writing to CoCo * Begin planning my animation |