Teacher: Benson Leung		Lesson Plan 1
Unit: Computational Thinking	Class: 7th / 8th Grade	Date:

Essential Question: [Danielson 1c] What is computer science and why is it important?

Standards: [Danielson 1c] **7-8.CT.4** Write a program using functions or procedures whose names or other documentation convey their purpose within the larger task.

Materials: [Danielson 1d, 1e, 3c] notebook, pencil, glue, scissor, handouts

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Learning Objective: [Danielson 1a, 1c]
SWBAT define computer science and design my first computer program.

Academic Vocabulary: [Danielson 3a]
Coding, program, algorithm, computer science, explicit

Do Now/Warm-up Activity (6 minutes): [Danielson 3d]
"**What does Computer Science mean to you?**" Have students answer this question in their notebooks.
Share out once timer ends. They may dance if finished early.

Mini Lesson – Step by Step Procedures (15 minutes): [Danielson 1a , 3a]
Play video from Flocabulary explaining what coding is.
Have your students try to use explicit instructions to get you out of the door.
Be as silly as possible. If no students are able to explicitly instruct you, you may show them and example.
Define *program*. Explain to students that they have just programmed you to perform a set of instructions.

Assessments [Danielson 1f, 3b, 3d]
Checks for understanding through questioning.
Exit ticket

Work Period *(They do)* **(20 minutes):**
[Danielson 1e, 2b, 2c]

Students will work in pairs and follow the instructions from Move It, Move It handout.

Differentiation: [Danielson 1b, 1c, 3e]

ELLs: translations available with technology and on slides.
SPED: N/A
Small Groups: Created based on misconceptions if needed

Summary: [Danielson 3c, 3d, 4a] (5 minutes)

- In the game we just played, who do you suppose was more like a programmer, and who was more like a computer?
- What were the four directions on the compass rose?
- What tricks can we use to remember North, South, East and West?
- How could we have given instructions without using our arms?
- What was your favorite part about that game?

Misconceptions: [Danielson 3d]
1 – Giving general directions instead of explicit directions
        i.e. "Go to the door" instead of "walk 3 blocks north of you"
2 – Using incorrect hand movements to direct partner
3 – Misunderstanding partner's hand signals