COMPUTER SCIENCE & DIGITAL FLUENCY SMART START GRANT LESSON PLAN

Date: April 2026 **Unit/Lesson:** Bee-bot around town

Approximate Time (in minutes) to complete lesson:

40 minutes

Grade Level:

2nd

Materials and/or Resources:

- **Bee-bot mats**
- **Bee-bots**
- **Location clues**
- **Blank practice mat**

CSDF Concept/Standard Addressed:

❑ Impacts of Computing
X Computational Thinking
❑ Networks and Systems Design
❑ Cybersecurity
❑ Digital Literacy
K-1.CT.8 2-3.CT.9 2-3.CT.6 2-3.CT.4

Student-friendly "I Can" Statements:

I can show that I know how to use input devices. I can show that different solutions exist for the same problem. I can detect and debug errors in basic algorithms.

Vocabulary Words:

Sequence: the order of steps
Algorithm: specific sequence of instructions

ENGAGING THE LEARNERS

- Show students the bee-bot, ask them questions about it: what is it, if they know or think they know how it moves?
- Explain and show what the buttons are and what they do
- Tell the students that the bee-bots need specific order of steps to move from one place to another

EXPLORING THE CONCEPT

- Have the students pair up and give each pair a bee-bot and blank mat
- Let each pair "play" with the bee-bot, trying to make it move from one square to another
- Students should learn that they need to press the "X" to clear the previous algorithm

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EXPLAIN THE CONCEPT(S)

- Ask the students what happens if they forget to press "X"?
- How do you make it go forward, backward, get it to start moving?
- Define
    - Sequence: the order of steps that are given or provided
    - Algorithm: a specific sequence of instructions or set of steps used to solve problems or perform tasks

ELABORATE

- Using the community themed mats, students choose a location clue
- They must answer the clue to determine where they need to program their bee-bot to go
- Then students program the bee-bot starting at the home square

EVALUATE: Assessment of Student Knowledge:

X Informal (observation, student work sample, etc..) Observe the students to make sure that they are pressing clear before each program. See if they can solve their clue and if they can get their bee-bot to the location.

❑ Formal (formative or summative)

Cross Curricular Links (standards):

Math- K.CC.1 using the bee-bot to count up to 20, K.G.1 using the bee-bot to help with positional words (forwards, backwards, in front of, behind).
Social Studies- K.6b, 2.5a using the bee-bot to learn about the community that students live in

Homework / Notes / Reflection:

Ask the students if anything was tricky or hard? What was their least favorite part and most favorite part?

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