

Lesson 18: Again?

Lesson 18 Overview: In Lesson 18, children will learn how to identify an ABAB pattern in a KIBO program, and create a program with such a pattern using Repeat and End Repeat Blocks.

Powerful Ideas from Computer Science: Control Structures, Algorithms, Modularity
Powerful Ideas from Literacy: Literary Devices, Sequencing

I. Warm Up: Repeat After Me Game

- Create a clapping pattern that has rhythm and repetition and ask children to follow the clapping rhythm.

II. Opening Tech Circle: What Is a Pattern?

- Ask children what things were repeated in the clapping game. Discuss how, in that game, the whole pattern was repeated.

III. KIBO Time: ABAB Patterns & Free Play

- With children, create a sample program with the Programmer Says cards or the KIBO blocks that uses multiple repeating blocks. Ask children what is repeating in the program and how many times it repeats
- Explain that if we want to use a repeat loop to show a pattern with multiple blocks, we need to make the inside of the loop bigger.
- Have children get into their KIBO groups and practice creating KIBO programs with different kinds of repeating patterns.

IV. Closing Tech Circle: Sharing Circle

- Have children share their programs. Encourage them to share what the repeating pattern of their KIBO program is and how many times the pattern repeats. If they used a repeat loop, have groups share how they created the same program using a repeat loop.