

Lesson 13: Repeat After Me

Lesson 13 Overview: Lesson 13 explores Repeat loops and how they can be used to make code more efficient. Children also identify and create AAAA and ABAB patterns using Repeat and End Repeat Blocks.

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

I. Warm Up: Little Red Wagon

- Sing to the repeat-after-me song “Little Red Wagon” as a class.

I. Warm Up: What Are Patterns?

- After singing at least two repetitions of the song, discuss with the class the repetitions they observed in the song. Ask, *What lines did we repeat several times?*

II. Opening Tech Circle: Creating Patterns

- Explain to children that now they’re going to work on creating patterns.
- Have children fill out their Design Journal. Using the journal, they will begin to identify AAAA and ABAB patterns!

III. KIBO Time: Repeating Patterns & Repeating Free Play

- Using the large Programmer Says cards or KIBO blocks, create a simple repeating pattern. Have children engage actively by asking about the repeating pattern. As a class, come up with several other examples of KIBO programs that have repeating patterns.
- Explain to children that we can use a repeat loop to make it easier to scan a KIBO program with a repeating pattern. Introduce the Repeat and End Repeat blocks, with the number parameters: 2, 3, 4, and forever.
- Allow children to free play with the Repeat Block and number parameters.

IV. Closing Tech Circle: Sharing Our Learning

- In a circle, have children share one interesting or surprising thing they learned during free play. Children are also welcome to share a challenge they encountered. Other children are encouraged to offer possible solutions.

Vocabulary:

Loop

Repeat

Pattern

KIBO Blocks:

Repeat Block

End Repeat Block

Number Parameters