LOOPING WITH MOVEMENT CARDS
COMPUTATIONAL THINKING: REPETITION & LOOPING

Every child is different. Do what works best for encouraging each child's exploration of this suggested activity.

OBJECTIVE OF THIS INVESTIGATION:

Children will create dances with loops using movement cards and numerals.

VOCABULARY:

- sequence
- repeat
- loop

MATERIALS:

- Movement cards (attached)
- Numeral cards (attached)

PROGRESSION STEPS (COMPUTATIONAL THINKING: REPETITION & LOOPING):

Visit **STEMIE Learning Trajectories** for details
- Repetition Recognizer
- Simple Looper
- Complex Looper

THIS INVESTIGATION:

- Gather children together in an area where there is enough room for children to use any necessary equipment as well as to move, dance, lay down, etc. and present the activity.

    "Today we're going to make dance sequences together."
- Show children the movement cards and ask them to help you interpret some of the moves.

    "Hmm, what do you think this dance move is? I think you're right; it does look like someone jumping. So, this card means 'jump.' What about this one?"
- Practice the dance moves with children and model creating a dance sequence.
- Next, introduce dance sequences that repeat (e.g., clap stomp, clap stomp, clap stomp).
- Try dancing the sequence with children and note how it's hard to follow along and remember where you are in the sequence.
- Introduce the number cards:

    "I wonder how we could use these number cards to make the sequence easier to read. It's hard to know how many times I should clap."

ADAPTATIONS:

See **A Guide to Adaptations** for general ideas and strategies

Materials:
- Use larger visuals and numerals for easier grasping and visibility.
- Attach Velcro to movement cards and allow children to stick them to carpet or Velcro board so the cards don't move around.
- Provide movement cards that all kids can participate in. Movements might be whole body, hand movements, or even facial movements.

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THIS INVESTIGATION (CONTINUED):

- Encourage children to use the number cards to make the dance sequence more efficient (i.e., repeating movements with one number card and one of each movement card: place the numeral card #3, one clap card, one stomp card). **(Complex Looper)**
- If children struggle, model using the number cards:

  "If I put a three in front of the picture for clap stomp, what do you think it means? Yes, clap stomp three times! Now I don't need so many cards for my sequence and it's easier to keep track of where I am."
- Give every child a turn to make a dance sequence that loops.
- Encourage children to use number cards if they don't do so independently and note how the numeral make the dance easier to interpret.
- If children struggle with complex loops, make loops simpler:
  - Create a sequence where only two moves repeat (e.g., clap, stomp).
  - Ask children to find the repeating part and to count the number of repetitions. **(Repetition Recognizer)**
  - Then add the numerals to match their count. **(Simple Looper)**

ADAPTATIONS (CONTINUED)

Instruction:
- Reduce the numerals represented (start with 2-3)
- Model actions and encourage children to repeat actions without requiring that they complete the action a certain number of times. Focus on repetition, which is a precursor to looping.

HOW TO CONTINUE THIS INVESTIGATION:

- Combine multiple movement and numeral cards (e.g., 3 claps, 2 stomps)
- Add a "Repeat" symbol (attached) so children can complete the loop more than once
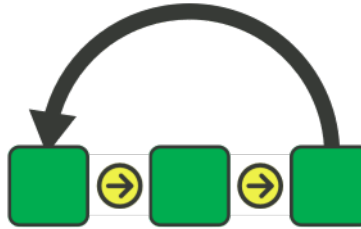
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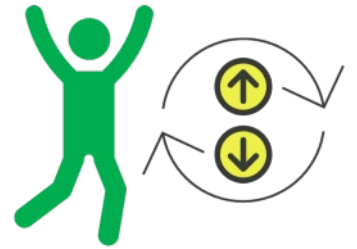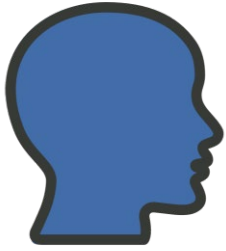
SUPPORT MATERIALS:

1

2

3

4
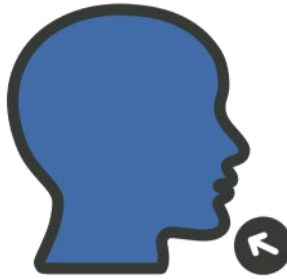
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6

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8

9

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SUPPORT MATERIALS:

Repeat

Looping

Jump

Step

Walk

Dance

Wave

Twirl/Spin

Jump

Looping with Movement Cards

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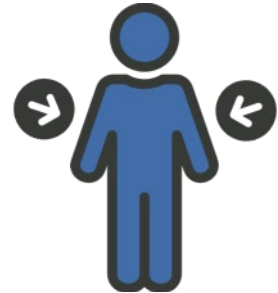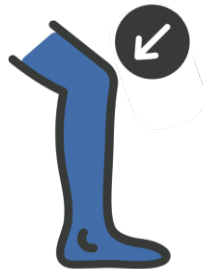
SUPPORT MATERIALS:

Head

Chin

Nose

Ear

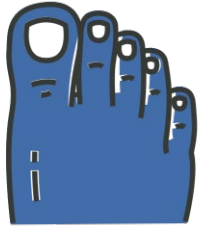**Shoulders**

Arms

Hands

Knee

Feet

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SUPPORT MATERIALS:

Use the blank ones to make your own!

Toes