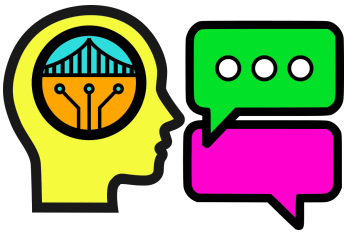

Make your own Cartoon

Lesson summary

Target Audience: *12-14 years old students with no prior knowledge about the subject*
Duration: *45 minutes*
Learning goals: Students will recognize, design, and communicate algorithms that contain loops (repetition) by building a short hand-drawn comic strip
Online or offline:
Computational Thinking:

- **CT-concepts**:
  - Sequencing: Each frame follows the previous one in order
  - Iteration/loops: Students compress a repeated action into a single “repeat n times” marker.
  - Abstraction: Replacing duplicated drawings with a loop symbol hides detail while preserving meaning
  - Algorithmic Communication: Peers must “run” another team’s cartoon by reading the loop instructions aloud.

Materials

per group of 2-3 students

- One Storyboard Sheet (two rows of six empty frames)
- Loop Tokens – small sticky notes/cards pre-printed with “Repeat 2”, “Repeat 3”, “Repeat 4” and an arrow ↺
- Markers or pencils
- Scissors & tape/glue (for moving loop tokens)
- Timer or stopwatch (teacher)

Preparation

1. Print & cut storyboard sheets and loop tokens.
2. Create a demo strip: three frames of a stick figure waving, followed by a token “Repeat 3” covering the next three frames.
3. On the board, write the words Sequence → Loop → Algorithm as anchors.

Lesson Description - Make your own cartoon

Introduction (5 minutes)
Lead the class in a rhythm pattern: clap–stomp–clap, then ask them to do it three times in a row. Ask: “Did we draw every clap-stomp on the board, or did we just say ‘do it three times’?” Introduce the term **loop.**

Core

Concept Mini-Lesson (5 minutes)
Show your demo strip. Point to the repeated waving: “If I had to re-draw this six times it’d be slow. Instead, I draw it once and add a loop token.” Emphasize how loops save time and reduce errors.

Create the Cartoon (20 minutes)

1. Groups brainstorm a 3-frame action (e.g., a ball bouncing, someone dancing, a flower blooming).
2. They copy that sequence into Frames 1–3.
3. They choose a loop token (2 – 4 times) and tape it over Frames 4–6, drawing an arrow back to Frame 1.
4. Encourage creativity: dialogue bubbles, expressive motion lines, colors.
5. Circulate; ask guiding questions: “What repeats? How many times?”.

Gallery Walk & Decode (8 minutes)

Half the groups stay; half walk. Visitors “execute” the cartoon aloud—e.g., “Wave, wave, wave (repeat 3).” After 2 min, switch roles

Reflection / Debrief (5 minutes)

Whole-class discussion: Where might programmers use loops? What was easier—drawing every frame or using a token?Record key takeaways next to the Sequence → Loop → Algorithm words

Exit Ticket (Evaluation) (5 minutes)

Each student writes: “My cartoon looped the action of ___ times because ___.” Collect on the way out.