

MP1 Coding (Virtual)

Content Area: **G&T**
Course(s): **G&T 4**
Time Period: **Marking Period 1**
Length: **Virtual**
Status: **Published**

Activities

Unit A: Basics of Coding

- Students will:

- Relate coding to their lives at home and school.
- Design a game(s) using a coding program, Snap!, developed by Berkeley University.
- Understand what a sprite is and how to create one.

- Students will:

- Understand what problems are best solved with sequencing.
- Use sequencing to revise code and complete coding challenges in an iterative process.

- Students will:

- Review using lights, sounds, and animations in sequences.
- Understand what problems are best solved with sequences.
- Use sequences to revise code and complete coding challenges in an iterative process.

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- Understand what problems are best solved with sequencing.
- Use sequencing to revise code and complete coding challenges in an iterative process.

- Students will:

- Understand what problems are best solved with loops.
- Use loops to revise code and complete coding challenges in an iterative process.

- Students will:
 - Demonstrate understanding of basic programming functions introduced in Level A curriculum: lights, sounds, animations, movements.
 - Learn about the beginning steps of the Design Thinking Process: Ask, Imagine, Plan.
 - Use a combination of drawing and speaking to narrate their thinking processes.
 - Explain ideas to peers and teacher audibly and clearly, with guidance and support from teacher, to improve their initial designs.