

Introduction to Coding Quest

What is Coding Quest?

Coding Quest is an opportunity for you to imagine, learn, and create. You will:

- Design, code, and share your own video game
- Learn and practice core Global Competencies
- Use the Engineering Design Process to create your game



What is Coding Quest?

Coding Quest is a real life trip through the process of building an educational video game.

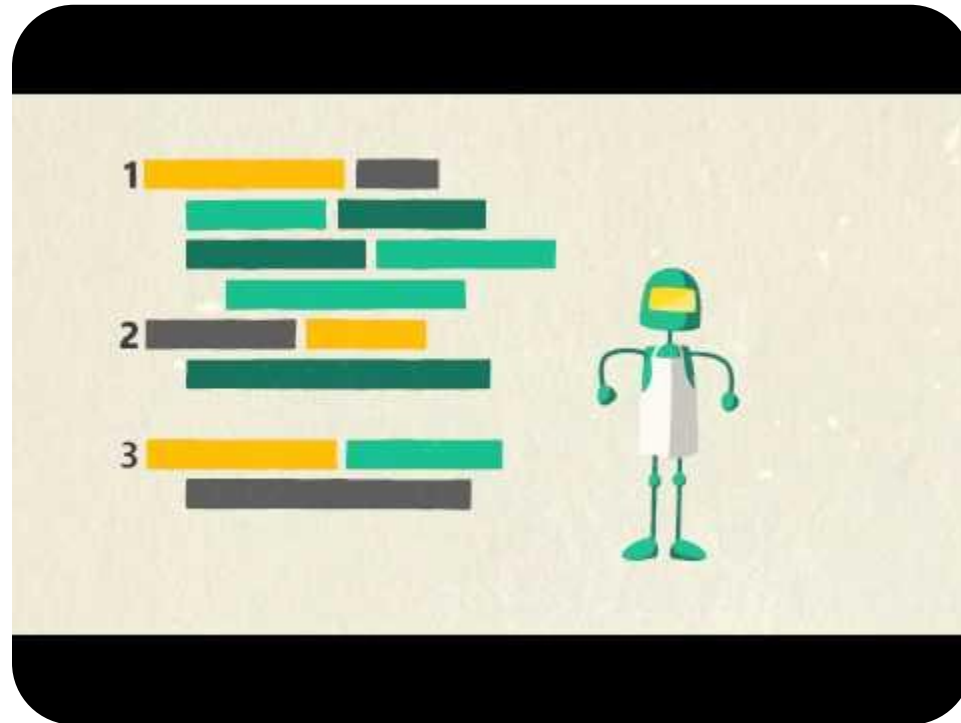
1. First, we will begin to learn about coding and continue throughout the project
2. Then, we will research a topic
3. We will use our topic to start designing an educational video game
4. We will create characters, write our game story, and code our game
5. We will share our game





What is coding?

Coding is...



Consider: Global Competencies

During today's lesson think about what Global Competencies we are focusing on. The Global Competencies are:



❑ Collaboration

❑ Innovation,
Creativity,
and
Entrepreneurship

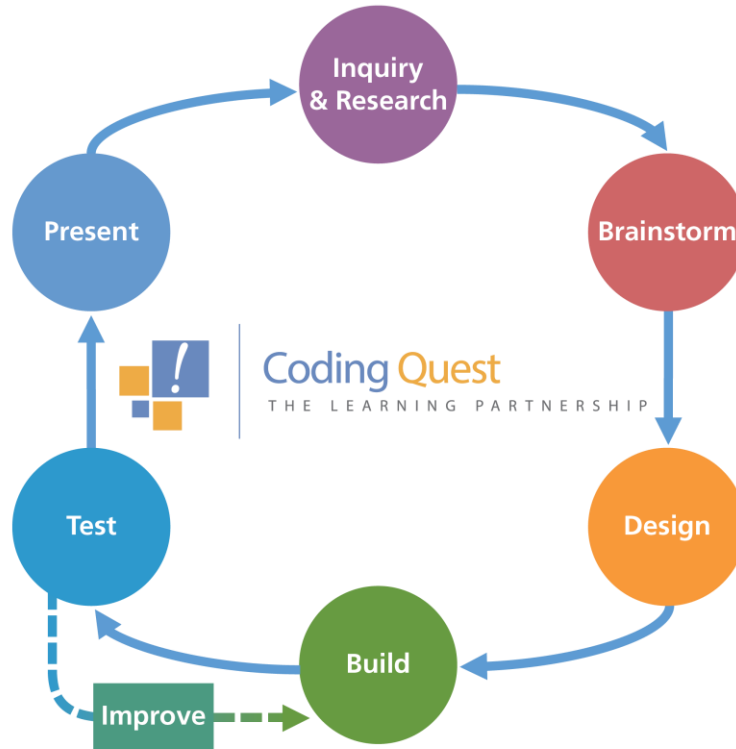
❑ Communication

❑ Citizenship

❑ Critical Thinking
and
Problem Solving

❑ Self-Directed
Learning

Coding Quest Anchor Chart



Why Coding Quest?

It opens up opportunities:

- Computer Programmer
- Game Designer
- Story Writer
- Animator
- Marketer
- Art Director

It helps develop skills:

- Collaboration
- Being responsible
- Creative
- Display initiative
- Organization
- Resiliency

*This program connects to art, music, language, mathematics, and everyday learning skills.

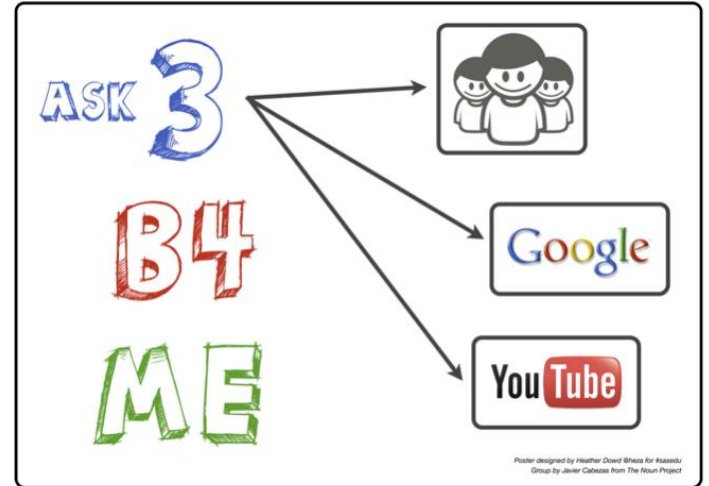
Problem Solving

You will be asked to solve problems on your own.

We expect you to attempt to solve the problem first, before asking your teacher.

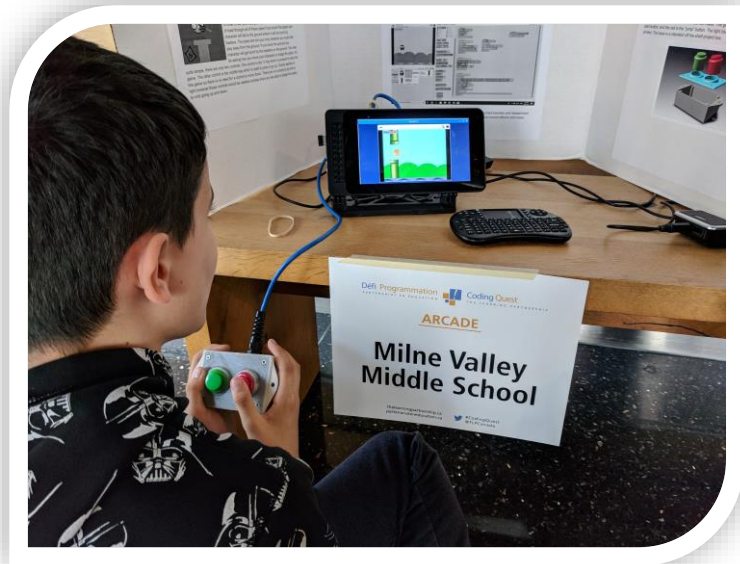
[Try three things before asking your teacher for help!](#)

That being said, as a classroom or team, you can all help each other. Collaborating with others is the quickest and most effective way to complete your coding.



Arcade

After we create our games, we're going to show them off at our very own Arcade!



Where Coding Can Take You



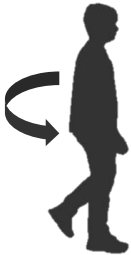
Body Coding

We are going to start by programming our bodies according to a series of movements.

move 10 steps



turn 180 degrees



Imagine your bodies as computers (or robots), designed to follow commands without thinking or judging.

Sequential

Start when the teacher claps their hands

- ✗ Walk 2 steps forward
- ✗ Turn 90 ° to the left
- ✗ Clap your hands
- ✗ Wait 2 seconds
- ✗ Walk two steps forward
- ✗ Turn 90 ° to the left
- ✗ Clap your hands
- ✗ Wait 2 seconds

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- ✗ Wait 2 seconds
- ✗ Walk two steps forward
- ✗ Turn 90 ° to the left
- ✗ Clap your hands
- ✗ Wait 2 seconds
- ✗ End

Repetition

Start when the teacher claps hands

- ✗ Repeat the sequence of instructions 4 times
 - ✗ Walk 2 steps forward
 - ✗ Turn 90 ° to the left
 - ✗ Clap your hands
 - ✗ Wait 2 seconds
- ✗ End

Selection

Start when the teacher claps hands

(Teacher says a statement, e.g. “Today is Monday”)

- × If [statement is true]
 - × Flap your arms for 5 seconds
 - × Wait 3 seconds
 - × Jump up and down for 5 seconds

- × Else [statement is false]
 - × Reach up as high as you can
 - × Wait 3 seconds
 - × Touch your toes

- × **End**

What did you notice?

- × What were the differences between the three types of body coding?
- × What do you think the words sequence, repetition, and selection mean?
- × Do you have any questions about coding before we move forward into Coding Quest?

Discuss: Global Competencies

Which Global Competencies have we applied today? Share some examples.



- Collaboration
- Innovation, Creativity, and Entrepreneurship
- Communication
- Citizenship
- Critical Thinking and Problem Solving
- Self-Directed Learning