

CodeCombat - Coding Logbook

Computer Science 1 (CS1)

Owner's Name:

Partner's Name:

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1. Start with the PRETEST inside the Class Website under the Unit / Rotations page.
2. Pick up your Learning Target / Daily Work Habits sheet. Complete the Work Habits side daily and check off Learning Targets as you master them.
3. Work through CodeCombat CS1 Levels 1-19 in order unless your teacher tells you otherwise.
4. Use this logbook to record what you learn, explain your thinking, and save evidence of your coding.

Overall Goal: Use code to guide a hero through challenges by writing clear commands, using correct syntax, repeating actions with loops, and storing information in variables.

Directions for each section:

- Read the questions before you begin the levels.
- Type or write your answers clearly.
- Talk and problem-solve with your partner, but make sure you understand your own code.
- Test your code. When it does not work, debug it before asking for help.
- Add a screenshot when asked.

CS1 Concepts You Will Learn

Concept	What it means
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Syntax & Sequences	Writing commands correctly and putting them in the right order.
Arguments & Properties	Giving commands extra information and reading information about objects.
While Loops	Repeating commands efficiently.
Variables	Giving stored information a name so it can be used again.

Lesson 1 - Syntax & Sequences

[Slide deck](#)

Learning Target: I can write commands with correct syntax and put them in an order that solves a problem.

Complete the beginning CS1 levels that introduce movement, basic commands, syntax, and sequences.

Questions:

1. What is syntax in computer programming?

Answer:

2. Why does the order of commands matter when your hero is moving through a level?

Answer:

3. What is a sequence?

Answer:

4. Look at one movement command you used. Write the command exactly as it appears in your code.

Answer:

5. Describe one syntax mistake you made or could make. How would you fix it?

Answer:

Screenshot 1 - A completed level showing your movement code

Paste or insert your screenshot here.

Lesson 2 - Arguments & Properties

[Slide deck](#)

Learning Target: I can use arguments to give commands information and properties to learn information about objects.

Continue through the CS1 levels that introduce arguments and properties.

Questions:

1. What is an argument?

Answer:

2. In a command such as `hero.attack(enemy)`, what information is being given to the attack command?

Answer:

3. What is a property?

Answer:

4. Give one example of information a property could tell you about an object or enemy.

Answer:

5. Why might a command need an argument instead of just empty parentheses?

Answer:

Screenshot 2 - Code that uses an argument or property

Paste or insert your screenshot here.

Lesson 3 - While Loops

[Slide deck](#)

Learning Target: I can use a while loop to repeat actions without rewriting the same commands over and over.

Continue through the CS1 levels that introduce and practice while loops.

Questions:

1. What is a loop?

Answer:

2. What is the main job of a while loop?

Answer:

3. Why are loops more efficient than typing the same command many times?

Answer:

4. Which lines of code repeat when they are placed inside a loop?

Answer:

5. Describe one CodeCombat challenge where repeating an action helped your hero succeed.

Answer:

Screenshot 3 - Code that uses a while loop

Paste or insert your screenshot here.

Quick Debugging Check

- ☐ Did I spell the command correctly?
- ☐ Did I use the correct capitalization?
- ☐ Did I include parentheses when needed?
- ☐ Is my code inside the loop where it belongs?
- ☐ Did I run the code and watch what actually happened?

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Lesson 4 - Variables

[Slide deck](#)

Learning Target: I can use a variable to store information and use that information later in my code.

Continue through the CS1 levels that introduce and practice variables.

Questions:

1. What is a variable?

Answer:

2. In ``enemy = hero.findNearestEnemy()``, what is the name of the variable?

Answer:

3. What information is being stored in the variable ``enemy``?

Answer:

4. Why is it helpful to give information a variable name?

Answer:

5. Explain what happens when a variable is used as an argument in another command.

Answer:

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Screenshot 4 - Code that creates and uses a variable

Paste or insert your screenshot here.

Lesson 5 - Debugging & Problem Solving

Learning Target: I can test my code, find mistakes, and make changes until my program works.

Use this page while completing the later CS1 levels. Choose one level that makes you stop, think, test, and revise.

Questions:

1. What was the name or number of the level you chose?

Answer:

2. What was your hero supposed to accomplish?

Answer:

3. What went wrong the first time you ran your code?

Answer:

4. What did you change to fix the problem?

Answer:

5. Which CS1 concept helped you most: sequence, argument/property, loop, or variable? Explain why.

Answer:

Screenshot 5 - Your corrected code

Paste or insert your screenshot here.

Screenshot 6 - Evidence that the level was completed

Paste or insert your screenshot here.

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Before you ask for help...

- ☐ Read the goal again.
- ☐ Read the error message, if there is one.
- ☐ Check spelling, capitalization, punctuation, and parentheses.
- ☐ Compare your code with a previous level or example.
- ☐ Run the code again and watch where the problem begins.

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Lesson 6 - CS1 Final Check

Learning Target: I can combine the CS1 skills I learned to solve coding challenges independently.

Finish CS1 Levels 1-19. Then complete this final check before taking the posttest.

Questions:

1. Which CS1 concept was easiest for you? Why?

Answer:

2. Which CS1 concept was most challenging for you? Why?

Answer:

3. How did using loops make your code more efficient?

Answer:

4. How did variables help your hero interact with enemies or objects?

Answer:

5. What is one debugging strategy you will use the next time your code does not work?

Answer:

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CS1 Completion Check

- ☐ I completed the assigned CS1 levels.
 - ☐ I answered the logbook questions.
 - ☐ I included the required screenshots.
 - ☐ I can explain what my code does.
 - ☐ I completed my Daily Work Habits checks.
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Grading Rubric for the Logbook

Score	Completion	What it looks like
4	Complete	All sections complete, thoughtful answers, required screenshots/evidence included.
3	Mostly Complete	Most sections complete; minor answers or evidence may be missing.
2	Partially Complete	Several sections, answers, or screenshots are missing.
1	Needs Time	Very little of the logbook is complete.

Finish the unit:

1. Complete the review/Kahoot assigned by your teacher.
2. Complete the POSTTEST inside Google Classroom.
3. Complete your final unit reflection.