

AP Computer Science Principles

Unit: Game Design

Lesson 2: Code a game from instructions, debug and improve

Link: <https://snap.berkeley.edu>

NYS Standards:

9-12.CT.8 Develop a program that effectively uses control structures in order to create a computer program for practical intent, personal expression, or to address a societal issue.

9-12.CT.9 Systematically test and refine programs using a range of test cases, based on anticipating common errors and user behavior.

Learning Intentions:

- ☐ Follow instructions to create a game, “Star Hunter” that involves the interaction of multiple sprites, and a score function.
- ☐ Remix your code to personalize it
- ☐ Explain how the code functions
- ☐ Debug and improve your code based on classmate feedback

Instructions:

1) Follow the steps for the game **Star Hunter** in “Coding games in Scratch

2) Paste a SHARED link to your project here (I will be able to see updates/changes as long as you save them).

3) Paste pics of each independent code segment (ie, each segment with a hat block at the top), and describe its purpose or function, and how it works.

CODE PIC	PURPOSE/FUNCTION/HOW IT WORKS

(Add rows as needed)

4) **REMIX!** Personalize your code with backgrounds, costumes and some variation on the game play. Explain your customization here:

5) TEST AND DEBUG:

Find a classmate to run your program.

Name of classmate:

Your classmate must suggest **1-2 ways** to improve your program. Document the suggestions in the table below. Before making changes, paste a script pic of the code that should be modified. After you make the changes, paste a pic of the improved code.

Suggestion	Old code	New Code