

# AP Computer Science Principles

Unit: Game Design

**Lesson 1: Analyzing the components of a game**

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.

## Learning Intentions:

- ☐ Understand that games have goals, components, core mechanics, space, rules and challenge
- ☐ Identify those aspects in games found on the Snap! website

**Do Now: (Answer on classroom) Consider the classic game Rock, Paper, Scissors. Identify the GOAL, CHALLENGE, CORE MECHANICS, COMPONENTS, RULES, and SPACE of this game.**

## Lesson

**Instructions:** Visit the [Snap Homepage](#) and play two or three games! As you play, fill in the following tables.

## GAME 1

What is the name of	
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the game?	
What is the goal or objective of the game?	
What are the components of the game? (How many sprites? What do they do?...)	
What are the core mechanics? ( <i>What actions does the player take? What actions do non-player characters take?</i> )	
What is the space the game takes place in? (Backgrounds, scenes, mazes...)	
What are the rules?	
What makes the game challenging?	

## GAME 2

What is the name of the game?	
What is the goal or objective of the game?	
What are the components of the game? (How many sprites? What do they do?...)	

What are the core mechanics? ( <i>What actions does the player take? What actions do non-player characters take?</i> )	
What is the space the game takes place in? (Backgrounds, scenes, mazes...)	
What are the rules?	
What makes the game challenging?	

## GAME 3 (if there is time)

What is the name of the game?	
What is the goal or objective of the game?	
What are the components of the game? (How many sprites? What do they do?...)	
What are the core mechanics? ( <i>What actions does the player take? What actions do non-player characters take?</i> )	
What is the space the	

game takes place in? (Backgrounds, scenes, mazes...)	
What are the rules?	
What makes the game challenging?	