**Level 1: Play the Simon Game**

**Outline**

Play the original Simon game to establish a mind-set around basic game systems. Research the history of game systems. Decompose the Simon game from perspective of input/output devices and processes.

**Objectives**

·       Icebreaker activity to establish community and classroom norms.

·       To realize that computers have evolved to take various forms in modern society.

·       To begin thinking about computers as a collection of input/output devices and processes.

**Materials & Resources**

·       Simon game obtained from teacher

**Questions**

1. Play the Simon game in your group while taking note of the following game-play items:

a. What was your personal best score?

my best score was 12

b. What was the personal best score in your group?

the best score in the group was 15

c. What makes it a good game?

A good game has to be fun to play not something that requires a lot of waiting or something that is so complex not everyone can grasp the idea of that game.

d. In what ways is it similar to modern computer games?

Modern computer games also provide a little game that can be used as something to do when you have nothing to do like the Simon game

2. Play the Simon game in your group while taking note of the rules of the game:

a. How do users input information into the game?

By pressing the buttons

b. How does the game output feedback to the players?

The sound and light from the buttons

c. What are the game options for starting the game?

Single and team mode

d. What are the end conditions for stopping the game?

Messing up the sequence

**Level 2: Simon History**

**Materials & Resources**

·       Simon game obtained from teacher

·       Suggested web resource: http://americanhistory.si.edu/collections/search/object/nmah\_1302005

**Questions**

1. Research the history of the Simon game, focusing on the following questions:

a. Who created Simon and when was it created?

Ralph Baer in 1978

b. What previous game was it based on?

“Simon says” and “Touch me”

c. What was the first game system and when was it released?

The Magnavox Odyssey

Released in 1972

d. What games did it have on it?

“Ball and paddle”, “Ping Pong”, “Table Tennis”, “Volleyball”, and others

2. In your group, discuss the following questions:

a. What is the oldest game system you have played on?

PS3

b. How are old games different from current games?

Old games are more simple and easier to play but have lower graphics

c. How are old games similar to current games?

Old and new games still have similar concepts like shooter games and sports games

3. Compare the Simon Game to other classic handheld game systems like the Nintendo DS:

a. List some similarities.

Both are hand held games that can be taken places

b. List some differences.

The Nintendo has many games you can play but the Simon game is just one game

4. Compare the Simon Game to modern console game systems:

a. List some similarities.

Both provide entertainment for anyone

b. List some differences.

Console games are much more complex than the Simon game

Console games are less portable

**Level 3: Inside the Simon Game**

**Materials & Resources**

·       Simon game obtained from teacher

·       Presentation Slides: Simon Vs. Light Switch

**Questions**

1. Consider a basic light switch:

a. What are some input devices?

The light switch

b. What are some output devices?

The light from the light

c. How do the inputs affect the outputs?

Without inputs there is no output

2. Consider the Simon Game:

a. What are some input devices?

Pushing the button to start

b. What are some output devices?

The game starting up

c. How do the inputs affect the outputs?

If the input is the same as the previous output then the game will continue otherwise it will tell you, you messed up

3. How is Simon similar to a light switch?

Without an input it won’t start also both are controlled by the input alone

4. How is Simon different from a light switch?

The Simon game has coding in it and uses batteries

5. Research on-line about what is physically inside the game and the components inside the package:

a. What electronics devices and components provide the logic and computer processing?

Input, Processing, Storage, Output and Communication devices.

b. What electronics devices and components collect physical input from the user?

Key devices, Pointer devices, Scanning devices

c. What electronics devices and components provide output (sight and sound) to the user?

Computer screens, Speakers, Printers

6. Research on-line about program logic (e.g. software) that is inside the game and recent projects to emulate (duplicate) the game on modern computers. Summarize your findings below.

Couldn’t anything about code in the game or recent projects to copy the game much about it.