# Unit 4: Programming

# Lesson: Days 7-8 – Event Driven Programming

# Overview

# Students will be learning Event Driven Programming in Scratch to create an Alphabet Learning Game that could be played by pre-school children. When the Letter/sprite is selected with the mouse the letter will change costumes, when the letter is typed on the keyboard a callout will explain the letter. Once the green flag is selected the game will go back to the original state.

**Objectives:**

**Students will be able to:**

* Explain event driven programming
* Write a program that responds to user created events from the mouse and keyboard

**Materials and Prep**

* Scratch (web-based)
* [Slideshow](https://docs.google.com/presentation/d/1wJHNjU_Ihd0zhVyMnoEbyejvMcLrlBgL05OT-NaT4cY/edit%22%20%5Cl%20%22slide%3Did.p)**[:](https://docs.google.com/presentation/d/1wJHNjU_Ihd0zhVyMnoEbyejvMcLrlBgL05OT-NaT4cY/edit%22%20%5Cl%20%22slide%3Did.p) *[Event Driven Programming](https://docs.google.com/presentation/d/1wJHNjU_Ihd0zhVyMnoEbyejvMcLrlBgL05OT-NaT4cY/edit%22%20%5Cl%20%22slide%3Did.p)***
* Alphabet Sample Rubric print out

## Resources

**Student Documents**

* Alphabet Game
* Alphabet learning.sb

# **Lesson Summary**

# Journal Entry:How do the programs on the computer know what the user wants to do next? In other words, if you are surfing the web, how does the computer know what page to go to next? Share answers with elbow partners.

* Teacher-led discuss using the [Slideshow](Day%2007%20-%20Scratch%20Event%20Driven%20%281%29.pdf) on completing the Alphabet game using Event Driven Programming.
* Have students go to Classroom.Google.com to retrieve Alphabet Sample Rubric
* Students will create an Alphabet Learning Game

# Students may use pictures from the Internet.

# Demonstrate to students how to download .gif and .jpg or .png from the Internet. Pictures can be saved as a .gif or .jpg.

# Students can import or paint to make it the second costume for the letter.

# Students will use a "switch to costume “block

# Output in talk bubbles - Use a "say\_for\_sec"block.

# Students will pick the theme for alphabet game (animals, food, etc.)

# Students will do a gallery walk periodically to get ideas for their learning game.

# Students will share their game on Edmodo for other students to see and play.

# CS Content

* Scratch Programming
* Loops
* Variables
* Counters

# Assessments

# Use the Alphabet Sample rubric to assess students understanding and knowledge.