Flash Final Exam Study Guide

*It’s definitely a good idea to study old tests and quizzes. Most importantly, however, you should focus on answering the questions on this study guide and doing the practice problems.*

*There will be two parts to the test, 45 minutes each. Part 1 will take place on Tuesday the 11th of December. Part 2 will take place on Wednesday the 12th of December. Students will be allowed to take the exam on the 20th of December during the normal finals timeslot should they choose to do so.*

*Part 1 will cover computer science basics, Flash basics, and drawing in Flash. It will feature a 20-minute written component that covers computer science and Flash basics and a 25-minute computer component that covers drawing in Flash. You will be allowed to look things up on the computer component but not the written component.*

*Part 2 will cover animating and ActionScript. There will be no written component, just a computer component.*

## Computer Science Basics

* Why were computers invented? When were the first computers made?
* What are the main components of computer hardware? What do they do?
* What are the two main types of computer software? What do they do?
* What is binary and how does it relate to how computers work?
* What is the binary number system? Can you write the numbers one through ten in binary?
* What is a zip file? When would you use it?
* What are bytes, kilobytes, megabytes, and gigabytes?

## Flash Basics

* What is Flash? What is it used for?
* What are .fla files? What are .swf files?
* What are stokes and fills?
* What are tweens?
* What are frames and frame rates?
* What are symbols and what are they used for?

## Drawing

* You will be given one drawing problem similar to this practice problem:
  + Create a plate of three chocolate chip cookies. Each cookie should be an instance of the same symbol. Each chocolate chip on each cookie should likewise be an instance of the same symbol. Gradients should be used on the plate and the cookie (but not the chocolate chips).
* Another practice problem:
  + Create this:

## Animating

* You will be given one animation problem similar to one of these practice problems:
  + Given graphics for a star and a meteor, animate them moving and spinning across the stage.
  + Given a stick figure, create a frame-by-frame animation of the figure doing the YMCA
  + Give a space ship, create a frame-by-frame animation of its lights blinking. Then, animate an instance of it moving across the screen using a motion tween.

## ActionScript

* You will be given the basic framework of a game and asked to make it playable. That is, you will need to add in various bits of code to get the game to work. The following example will be similar to the actual test question:
  + Looking at the game file you’ve been given, make the start and replay buttons work.
  + Keep track of the score. Clicking on the clown gives a point.
  + Make the game end after 15 seconds.
  + Add a sound effect for clicking the clown.
  + Show the score at the end of the game.