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| **Unit:** Basics | **Turn In List:** **1. Terms and 2. Pde for Zoog, history of the computer** |
| *“I will be able describe the major events leading to the evolution of computer technology.”* | |

**Computer History: How it all began.**

**Content Objectives:** Students will be able to site the major events leading to modern technologies related information and information processing. We will also explore custom functions (methods) in Processing.

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| **Starter Activity** |
| Zoog Source Code:  void setup () {  size(200,200);  background (255);  }  void draw() {  drawZoog (mouseX,mouseY);  }  void drawZoog(int x, int y) {  background (255);  // Set CENTER mode  ellipseMode (CENTER);  rectMode (CENTER) ;    //body  stroke(0);  fill(150);  rect(x,y,20,100);    //head  stroke(0);  fill(255);  ellipse(x,y,60,60);    //eyes  fill(0);  ellipse(x,y,16,32);  ellipse(x,y,16,32);    //legs  stroke(0);  line(x,y,80,160);  line(x,y,120,160);    //arms  stroke(0);  line(x,y,80,100);  line(x,y,120,100);  }   1. Students will change the code so that the entire body moves with the mouse in proportion. 2. Students will color background and body parts to their own preference. 3. Students will add four elements either to the character or the background that are fitting for the scene. 4. Students will increase the dimensions of the canvas to a width height between 500-900 pixels.   What would your approach be for making more Zoogs? |

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| **Key Terms:** | |
| Vacuum Tube | 1st gen o’ computers. Early 40’s – Early 50’s. 6-10 inches, short lived, pricey. Temporarily stores a state of on or off. |
| Transistor | Same function as a vacuum tube, but smaller, faster, longer lived, and more energy-efficient. |
| Integrated Circuit (IC) | Basically a bunch of packed transistors, but better. |
| Microprocessor (CPU(Central Processing Unit)) | Backbone for computers since 1970 until today. Millions/Billions of transistors built into it. Has reached its theoretical speed limit. |
| Punch Card | Cards that have perforated squares that function as a program for early computers |
| Mainframe | One computer with lots of units connected to it |
| PC | All the stuff for a computer in one unit |

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| **Coding Terms:** | |
| Function/method | An algorithm with a name |
| parameter | Additional information that we give to a method to utilize its functionality better |
| Function call | Refers to the name of the method and passing in its values |

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| **History and Background:** |
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| **Assignment Tutorial (Setup and Class Demonstration):** |
| Students will create a visual timeline in a new 900 x 400 document spotlighting 8 key events in the history of computers using <http://en.wikipedia.org/wiki/History_of_the_computer> as a reference. Use a custom function for each event to place on the timeline. You will need to refer to the “text()” function and the “String()” class in Processing reference. Create 4 events above and 4 events below the timeline and include a title (see example below).  Macintosh HD:Users:kkapptie:Desktop:Screen Shot 2013-09-16 at 9.40.28 AM.png |

Notes (Points of interest, mistakes, lessons learned, web resources, and thoughts):

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