|  |  |
| --- | --- |
| **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.

|  |
| --- |
| **Starter Activity** |
| 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?  void setup(){  //Set the size of the window  size(500,500);  }  void draw() {  // Draw a white background  background(255,0,243);    //Set Center mode  ellipseMode (CENTER);  rectMode(CENTER);    //Draw Zoog's body  stroke(0);  fill(0,255,87);  ellipse(100,100,20,100);    //Draw Zoog's head  stroke(0);  fill(0,255,87);  ellipse(100,70,60,60);    //Draw Zoog's eyes  fill(0);  ellipse(81,70,16,32);  ellipse(119,70,16,32);    //Draw Zoog's legs  stroke(0);  line(90,150,80,160);  line(110,150,120,160);  fill(139,147,142);  //Spaceship  fill(50);  ellipse(420,130,30,40);  fill(0);  ellipse(420,140,80,30);  line(410,150,405,160);  line(420,155,420,163);  line(430,150,435,160);  //Moon  fill(139,147,142);  ellipse(250,400,800,500);  ellipse(200,300,80,80);  ellipse(300,200,80,80);  ellipse(450,350,80,80);  ellipse(100,450,80,80);  ellipse(300,400,80,80);  ellipse(70,250,80,80);    } |

|  |  |
| --- | --- |
| **Key Terms:** | |
| Vacuum Tube | This controls the flow of the electrons in the computer, allowing digital computations to happen a long time ago |
| Transistor | This is a binary switch that is the main part of a computer circuitry |
| Integrated Circuit | An electronic circuit on a conductive material that functions like a large circuit |
| Microprocessor | Similar to an integrated circuit, and has all the functions of a CPU |
| Punch Card | A card perforated through code, typically used in programming things such like voting machines and data into computers |
| Mainframe | Used for bulk data processing, and processes statistics. Basically a huge computer capable of high processing power |
| PC | This is a personal computer, or an IBM compatible computer |

|  |  |
| --- | --- |
| **Coding Terms:** | |
| function | A type of procedure or routine that has a return value |
| parameter | A special kind of variable used to refer to pieces of data |
| Function call | This is what the parameter refers to and helps, which has the actual input |

|  |
| --- |
| **History and Background:** |
|  |

|  |
| --- |
| **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):

// History of Computers Timeline

//colors

void setup() {

size(900,400);

background(#FFCFA6);

}

void draw() {

fill(#FFF4CB);

//Top boxes

rect(100,90,120,30);

rect(300,90,120,30);

rect(500,90,120,30);

rect(700,90,120,30);

rect(420,150,100,30);

//Bottom boxes

rect(120,250,120,30);

rect(300,250,120,30);

rect(500,250,120,30);

rect(700,250,120,30);

//Middle Line

line(50,200,850,200);

//Top arrow

line(200,200,150,120);

line(400,200,350,120);

line(600,200,550,120);

line(800,200,750,120);

line(500,200,470,180);

//Bottom arrow

line(220,200,150,250);

line(420,200,350,250);

line(620,200,550,250);

line(820,200,750,250);

//Title

fill(#7F7F7F);

textSize(45);

text("Computer History Timeline",180,50);

//Box Titles

fill(#7F7F7F);

textSize(15);

text("ENIAC-1946",425,175);

textSize(14);

text("Abacus-3000B.C.",100,115);

textSize(15);

text("Calculator-1600",120,270);

textSize(8.5);

text("Punched Card Devices-1800",300,115);

textSize(15);

text("TDC-1938",320,270);

textSize(13);

text("Mainframes-1950",505,115);

textSize(12);

text("Minicomputer-1960",500,270);

textSize(11);

text("Microcomputer-1980",700,115);

textSize(15);

text("Internet-1990",705,270);

}

void drawRef() {}