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| **Unit:** Methodology | **Turn In List:** **1. Terms** |
| *“I will vow to format code so that it is readable and easy to interpret. Good developers don’t try to hide things in source code.”* | |

**Conditions and Formatting Code: Using proper format while introducing conditions in code**

**Content Objectives:** Students will be able to identify and format code appropriately while using appropriate methods with return values.

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| **Starter Activity** |
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| ../../Desktop/Screen%20Shot%202017-10-13%20at%207.43.24%20AM.pn  ../../Desktop/Screen%20Shot%202017-10-13%20at%207.44.55%20AM.pn  ../../Desktop/Screen%20Shot%202017-10-13%20at%207.50.54%20AM.pn |

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| **Key Terms:** | |
| White Space |  |
| Camel or Pascal Case |  |
| Condition |  |
| If |  |
| If else |  |
| Boolean Expression |  |
| Boolean Variable |  |

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| **Assignment:** |
| PImage img;  void setup() {  size(2000,900);  img = loadImage("MPHKMH.jpg");  }  void draw() {  background(0);  image(img,-525,100);  drawRef();  textSize(30);  text("By:Jaxon Driver",1700,160);  text("MPH to KMH Converter",825,160);  fill(#FFD53B);  textSize(40);  text("Miles:" + mouseX,10,40);  text("Kilometer:" + mConverter(mouseX),400,40);  rect(0,80,mouseX,10);  println(mConverter(60.0));  println(kConverter(60.0));  //noLoop();  }  void drawRef(){  stroke(#ED8402);  line(0,80,width,80);  for(int i=0;i<width;i+=50){  fill(#FFD53B);  stroke(0);  textSize(12);  text(i,i,90);  stroke(#ED8402);  line(i,40,i,130);  }  }  float mConverter (float val) {  val = val \* 1.6;  return val;  }  float kConverter (float val) {  val = val/2 + val/4;  return val;  } |
| For this assignment students will create a conversion app that utilizes a method with a return value and the position of the mouse or a line on the screen controlled by the keyboard (or both). Make sure to include the following:   * Title and developer info (your name) * Onscreen instructions * Reference line or shape * Numbered increments and tic marks on screen (hint: use loop) * Updated total as the mouse moves or the arrow keys are pressed   Appropriate conversions may include any of the following:   * Any distance measurement i.e. miles to km etc. * Any volume measurement * Any currency conversion * Math functions i.e. squares or squareroots * Etc. |

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

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