Lesson 14

Set Up

The Reveal:

* Using knowledge of if statements and the process of creating buttons, make an interactive animation that reveals certain aspects once the mousse is dragged over it.

Project Goal:

1)   Generally, what should the project look like?

A scene that looks relatively simple, but is interactive. The mouse can be dragged over different object and the scene comes to life.

2)   What skill(s) are being learned/ practiced?

3)   What concept are students gaining insight on?

Programming/ Math Vocabulary:

Lesson 13
Outline

Introduction to Topic:

"Today we are going to be using conditional statements and mouse interactions to make a simple scene interactive and more exciting.

Project Breakdown:

1) Draw a scene

2) Write and if statement for the button using mouseX and mouseY to add mouse interactions into the scene

3) Create multiple if statements

4) Problem solve and trouble shoot errors

Example Projects/ Basic Source Code:

```
draw = function () {
    noStroke();
background(255,51,0);
fill(255, 100, 0);
ellipse(350, 350, 200, 200);
// changes color of sun
if(mouseX > 250 && mouseX < 450
&& mouseY > 250 && mouseY < 325){
fill(128,0,0);
ellipse(350, 350, 200, 200);
}
//scene
fill(102,51,0);
ellipse(100, 350, 200, 50);
ellipse(550, 350, 1000, 50);
rect(0, 350, 1000, 50);
fill(120, 51, 0);
ellipse(700, 400, 200, 105);
rect(0, 400, 1000, 500);
```

```
// makes trees appear
if(mouseX > 600 && mouseX < 800 && mouseY > 350 &&
mouseY < 400){
//trees
fill(0,153,51);
triangle(681,368,696,348,712,368);
fill(70,51,0);
rect(692,368,10,25);
fill(0,153,51);
triangle(713,368,723,348,733,368);
fill(70,51,0);
rect(719,368,10,25);
}
// makes cloud appear
if(mouseX > 600 && mouseX < 800
&& mouseY > 200 && mouseY < 300){
fill(150, 51, 0);
rect(0, 500, 1000, 200);
fill(230,30,10);
ellipse(650, 250, 250, 50);
ellipse(550, 250, 400, 25);
ellipse(700, 275, 400, 25);
} };
```