Reacting to the Mouse and Keyboard

The `mousePressed`, `mouseX`, and `mouseY` Variables

```cpp
void draw() {
    stroke( 0, 0, 0 );
    fill( 255, 50, 50 );
    if ( mousePressed ) {
        Circle( mouseX, mouseY, 50, 20 );
    }
}
```

`mousePressed` is a built-in variable that is always telling you if a mouse button is currently pressed.

`mouseX` and `mouseY` are built-in variables that are always telling you where the mouse cursor is.
void draw() {  
  if (keyPressed) {  
    switch (key) {  
      case 'r':  
        fill(255, 50, 50);  
        break;  
      case 'g':  
        fill(50, 255, 50);  
        break;  
      case 'b':  
        fill(50, 50, 255);  
        break;  
    }  
  }  
  if (mousePressed) {  
    Circle(mouseX, mouseY, 50, 20);  
  }  
}

The keyPressed and key Variables

keyPressed is a built-in variable that is always telling you if a keyboard key has been pressed.

key is a built-in variable that tells you what key has been hit.

The switch/case statements are Processing's way of checking many values without having a whole slew of if-statements.

You can also define your own functions to handle the mouse and keyboard explicitly, but we don't need these yet.

void mousePressed() {  
  if (Debug)  
    println("mouse button = " + mouseButton);  
}

void mouseMoved() {  
  if (Debug)  
    println("mouse has been moved: " + mouseX + ", " + mouseY);  
}

void mouseDragged() {  
  if (Debug)  
    println("mouse has been dragged: " + mouseX + ", " + mouseY);  
}