



## Homework 5: The Raes-Fry Robot

**Goal:** You will familiarize yourself with the Raes-Fry Robot discussed in lecture, and make it *fly*! You will get experience with Processing, learn how a design becomes active, see the behavior of many forms of the program, and watch a variable work.

### **Part 1: Color the Robot**

In class, we colored parts of the R-F Robot. Change the color of at least four of the robot parts. (Use the copy of the program that comes with this assignment, since it has one small addition needed for later.)

### **Part 2: Activate the Robot**

As given in the file, the robot is a static, unmoving image, but in computing, we like things to “work”. Check the “Activate” Resource and find out how to make an image active. Note, that after you have made the changes, nothing will actually “work” until you do the next part.

Decompose the robot into the two parts. In the `draw( )` block, place all of the robot’s drawing commands; in the `setup( )` block, place everything listed after the first line and up to the drawing. Finally as the first instruction of the `draw( )` block, add a

```
background(64);
```

command.

### **Part 3: Make the Robot Move**

Add at the end of the `draw( )` block the instruction

```
x=x+1;
```

This causes the integer `x` to be increased by one each time the robot is drawn. That will help us make the robot move.

Follow the instructions and answer the questions in the survey found at <https://catalyst.uw.edu/webq/survey/snyder/121677>

When the survey is finished, save your work. Rename a copy of the `.pde` file with your name on it, and submit it into the class drop box.

**Wrap Up:** You’ve programmed Processing for the first time, and made the G-F robot move. You have learned how to make incremental changes in your program

**To Turn In:** You will complete the survey, and turn in a copy of our finished program.