

## **Final Project – Brainstorming and Drawings**

### *Physical Science and Technology*

#### **Step 1:** *Brainstorm (due Monday, May 21)*

Come up with 5 unique ideas for a device you could make in this class. Work individually. Each device must a) allow you to make measurements using either the force or motion detectors and b) allow you to make quick, repeatable changes that will allow you to test three different “settings” for your device.

Idea #1: \_\_\_\_\_

Idea #2: \_\_\_\_\_

Idea #3: \_\_\_\_\_

Idea #4: \_\_\_\_\_

Idea #5: \_\_\_\_\_

#### **Step 2:** *Pick a partner (due Monday, May 21)*

You may choose one other person in the class to work with, or you may request to work individually. In either case, you **MUST** get an instructor to approve your choice before you go on to step 3.

My partner is: \_\_\_\_\_

Approved by: \_\_\_\_\_

- or -

I want to work individually

Approved by: \_\_\_\_\_

#### **Step 3:** *Pick one of your ideas to use as your final project (due Monday, May 21)*

The invention I/we want to make is: \_\_\_\_\_

#### **Step 4:** *Ask a question that your device can answer (due Monday, May 21)*

I am investigating the relationship between: \_\_\_\_\_ (choose something that the force or motion sensor can measure) and \_\_\_\_\_ (describe the “setting” that adjusting your device will change).

**Step 5:** *Thumbnail sketches (due Monday, May 21)*

Draw 4 thumbnail sketches for your invention. These sketches can be overall drawings, schematics, diagrams, or plans. If you are working with a partner, each of you needs to have 4 unique thumbnail sketches (8 total thumbnails). If you need additional space, use a separate sheet of paper.


**Step 6:** *Final drawing (Due Wednesday, May 23)*

Using A+CAD, make a detailed drawing of your device's design. If you are working with a partner, you each need to turn in a drawing that shows a different view of your device. Your drawings need to be detailed and include rough measurements and show your device's functionality.

**Step 7:** *Materials list (Due Wednesday, May 23)*

List the materials you expect to use for your project and you would like us to provide. Be sure to include measurements so we know how much to provide.

[illegible]