Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Syringes Hydraulic Assignment**

**Define:**

Design Challenge: Create a closed hydraulic system (not pneumatic) using syringes and tubing that has at least two movements. Your hydraulic system must be sturdy and freestanding.

**Ideate:**

Decide on a task for which you would like to design a system; you may use the iPad’s to research ideas. Ensure you record sources you use so that you can credit them.

Design your system, producing rough drawings of the components you will use, and sketches of how they will come together. Be sure to include labels. This is recorded in the attached booklet.

**Prototype / Test / Make:**

* Build your design, making alterations as needed
* Record Alterations and Changes based on Testing process
* At the end of each class – take the last 15 minutes to reflect on progress and identify the progress you have made in the booklet. You may also want to take pictures to add to the booklet.

**Share:**

Take a video of your hydraulic device in action against a green screen.

Add in a background and music.

**~One booklet to be completed per group. Ensure that everyone is doing their share!~**

**Day 1: Ideate**

Research Ideas – Record the sites that inspire your design here:

**Sketch your ideas:**

Design your system, producing rough drawings of the components you will use, and sketches of how they will come together. Be sure to include labels.

**Ideate Phase Continued**

**Day 2: Prototype and Test**

**Record / Document your progress today here. Fill out Reflections.**

**Reflections:**

**Choose one of the following:**

 **We used our time effectively today**

 **We could have used our time better**

**Explain your choice:**

**We needed to adapt our plan; this is what we needed to do . . .**

 **or this is what we learned today**

**Day 3: Prototype and Test**

**Record / Document your progress today here. Fill out Reflections.**

**Reflections:**

**Choose one of the following:**

 **We used our time effectively today**

 **We could have used our time better**

**Explain your choice:**

**We needed to adapt our plan; this is what we needed to do . . .**

 **or this is what we learned today**

**Day 3: Prototype and Test**

**Record / Document your progress today here. Fill out Reflections.**

**Reflections:**

**Choose one of the following:**

 **We used our time effectively today**

 **We could have used our time better**

**Explain your choice:**

**We needed to adapt our plan; this is what we needed to do . . .**

 **or this is what we learned today**