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

Reverse Engineering: Activity 1, Engineering in Reverse!

**Before you begin teardown of the device answer these questions.**

1. What is Reverse Engineering?

1. Why are products reverse engineered?

1. How is this device a system?

1. Describe input, process, output and feedback aspects.
2. What is the purpose of this product?
3. Estimate how many parts are required to make it.
4. Who is the customer?
5. In addition to the customer who are the other stakeholders?

On the engineering paper below, complete a detailed drawing of the internal components (i.e, the inside mechanisms) in the item before it has been disassembled.

Your drawing should include:

• Label for all parts

• Brief description of each part’s function(s)

BEFORE Disassembly



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

Reverse Engineering: Activity 1, Engineering in Reverse!

On the engineering paper below, complete a detailed drawing of the internal components of the item after it has been disassembled. Your drawing should include:

• Label for all parts

• Brief description of each part’s function(s)

AFTER Disassembly



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

Reverse Engineering: Activity 1, Engineering in Reverse!

After you have completed your drawing, answer the following questions.

1. What does this device do? What parts make it work this way?
2. How would you improve the way this device is made?
3. How could you change this device to make it more cost effective to produce?
4. Can you redesign this device to make it function differently? How would you do this?