Engineering in Reverse! Activity – Engineering in Reverse Worksheet

In the box below, complete a *detailed* drawing of the internal components (i.e., the inside mechanisms) in the push-toy before it has been disassembled. Your drawing should include:

- Label for all parts
- Brief description of each part’s function(s)

**BEFORE Disassembly**
In the box below, complete a *detailed* drawing of the internal components of the push-toy after it has been disassembled. Your drawing should include:

- Label for all parts
- Brief description of each part’s function(s)

**AFTER Disassembly**
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?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________