Engineering Design Cycle/Process Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Final Project Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period 1 3 4 5 7 8

The engineering design process helps engineers and other problem-solvers come up with creative solutions. You are an engineer. Choose ONE engineering problem below, and follow the steps to invent a solution.

A. Your new pet kitten is trapped in a ten foot deep hole. You need a contraption to safely rescue your poor animal.

B. You are going on vacation for a month and can’t find anyone to water your plants while you’re gone. You need a device that will give your plants the right amount of water – not too much and not too little.

C. You like to read before you go to sleep, but you don’t have a bedside lamp. You need a way to turn off the light switch across the room without having to get out of bed.

**\*\*\* I choose project: A B C**

1. **Ask**: What is the problem? What needs to be improved? What is your goal?

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2. **Imagine** – What are the solutions? Brainstorm ideas and list them. Choose your best idea.

**\*\*NOTE: You cannot design/use a Computer App as part of your process.**

( You must come up with at least 3 different ideas. You can do more.

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

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

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

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

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

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3. **Plan** – Draw a detailed picture of the solution you chose. ***Label*** the drawing to explain what each part is made out of, how the parts fit together, and how it will work. This is your BLUEPRINT.