Math – Middle Level – April 27th to May 1st

## <u>Design Your Own Garden</u>

This assignment may be done on paper, typed in Word,

designed in PowerPoint, created in Minecraft,

with cardboard, in your garden or any other format you can think of.

Be creative. Use this opportunity to begin planting your own garden.



Engineering Design Process

Ask – Define the Problem

Design a garden

**Imagine** – Research different types of gardens (raised beds, greenhouses, large farms, family gardens). What equipment will you need for your garden? How will you keep your garden safe from predators, large and small? What other problems could arise?

**Plan** – Step #1 Design your garden. Be sure to include measurements. What is the perimeter of your garden? Is it a rectangle or is it a different shape? What is the area of the garden? What is the perimeter and area of each section in your garden? Do you have raised beds for your herbs? What is the area of the raised beds?

Step #2 Make a list of ALL the equipment and materials you will need.

**Create** – Build a model of your garden. Use items you have around the house. (paper, cardboard, recyclables, popsicle sticks, rocks, etc)

**Improve** – What are the best parts of your garden? Are there any problems with the design of your garden? What areas can you improve on? What would you change for next time? How does your garden compare to other gardens you have seen or created in the past? What suggestions would you give to a friend who is designing a garden? Can someone use this design for a real garden? Why or why not?



