Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: 11/5/2018 Period: \_\_\_ IN CLASS ASSIGN.

Objective: I can understand the individual parts of the design process as it pertains to an engineering problem. (25 points)

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| PLTW – Design Process | How I Used It? |
| Define the Problem | **I had to design a 2D house with doors, windows, chimney and other parts and pay attention to aesthetics. I then had to cut it out and create a 3D model along with a yard.** |
| Generate Concepts | **My teacher showed us several examples of 3D houses built using reusable materials. I also have real world examples of houses.** |
| Develop a Solution | **I used rulers, stencils, pencils and a template of a house to create my 2D visual prototype. I used various coloring utensils to focus on aesthetics. I cut out my house and it was laminated. Then I assembled my model house. Afterwards, I created my yard using reusable materials.** |
| Construct a Prototype | **I used a pencil and a ruler to create straight lines. I also used stencils to create perfect circles. I paid attention to aesthetics by coloring uniformly and using colored pencils/markers. I cut out my house on the solid lines and laminated it onto cardstock so it would be sturdy. I cut it out along the solid lines and folded along the dotted lines. Finally, I glued the tabs together. Afterwards, I created my yard.** |
| Evaluate the Solution | **The 7th and 6th graders will be given 5 votes/student. The top 10 houses go upstairs and teachers will vote. The voting will be based on aesthetics and creativity.** |