Mrs. James, 7th Grade PLTW- Blizzard Assignment #1

1. Watch the Design Process Videos in mypltw.org, Activity 1.1, Steps 9-15.
2. Answer question #1 on the Activity 1.1 Check for Understanding handout.
3. Read the scenario for the design problem a local school is having.
4. Read the steps the school is taking to address the design problem. The steps are out of order.
5. Write the NAME OF THE STEP in each box next to the step described. DO NOT WRITE THE NUMBER OF THE STEP.
6. If you do not have a printer at home, please let me know at school so I can print a copy for you.

Due: two weeks after you receive the assignment.

**Activity 1.1 Check for Understanding**

1. Which step of the design process do you think is the most important***? Explain your reasoning. (***Review your Reflection Table from the Foot Orthosis Design Challenge.)

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1. A local school is building a video recording studio to be used by their media classes. They want to mount a camera to the ceiling so that they can capture video from that angle. They purchased a camera mounting kit that is meant to attach the camera to the ceiling. However, they find that they are unable to attach their camera to the mount. They ask their engineering students to help them design a solution to this problem. The steps that the engineering students took to design a solution are documented below, ***but they are out of order.***

Read through each description of what the design team did and match it to the corresponding design process step. See your Reflection Table for the names of the steps.

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| --- | --- |
| The Design Team … | Design Process Step |
| Showed and described their solution to the group in charge of building the studio. They explained the process they followed to arrive at their solution. |  |
| Brainstormed ideas for possible solutions. They sketched their ideas, compared them, and identified the best possible solution to pursue. |  |
| Built and tested their solution. They used the mounting brace they created to attach the camera to the mount. During the test, they determined any flaws to the design.  |  |
| Evaluated the design opportunity. They asked questions, did research, and determined the design requirements for their solution. |  |
| Created detailed technical drawings to use to produce their solution. |  |
| Used the test results to identify any modifications that they needed to make to improve their design. Once they identified these modifications, they returned to the previous steps of the process and made and tested these modifications. |  |