

PVC 2 project

Project Make/Make 2

Due: 4th period, Tuesday 1/19/21 midnight
3rd, 7th, Wednesday 1/20/21 midnight

Here is a new PVC object that I created. What is it? It could be a clothes drying rack. You tell me, what would this be good for?

Here's another view of it:



Your tasks:

1. As before, make a parts list.

First, figure out how many connectors of what type are required to make this. This creation uses a plus sign connector that our first object did not use (a four way connector), plus elbow connectors and T-connectors.

Second, figure out how many pieces of pipe of what length are needed. This creation only uses two lengths of pipe. To figure this out you need to know the approximate size of the entire thing:

It is 28 inches tall and 20 inches across both ways through the four way connectors. (So from the center, about 10 inches out to each side.) There are only two different lengths of pipe here. Figure out how many of each length are needed, then go to the next page.

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2. Open the Google Doc attached to this assignment in the Google Classroom. (A copy of the Google Doc "PVC2" for you to edit is already in this assignment in the Google Classroom.)
3. In the Google Doc, answer the question: What do you think this creation is?
4. Then, fill out the parts table in the Google Doc. The table should list the three different connectors and how many of each are required. Then it should list the two different lengths of pipe and how many of each length are required.
5. After you have listed the number of connectors and the number of which length of pipe needed, figure out the total length of pipe required to make this. I'm not asking for how many pieces of pipe, I'm asking you to figure out how long of a piece of pipe we would need if we wanted to build this. If you aren't sure what I'm asking, [watch this video where I walk you through it for PVC1](#). It's a short video and I think it will help you see what I'm asking, even though the numbers will be different for PVC2.

If you have watched the video and are still not clear, consider this scenario (this is just an example, not based on today's project): if you need 20 pieces of pipe that each have to be six inches long, you would do 20 times 6 to get 120 inches of pipe needed altogether. Then, if you need 10 more pieces of pipe that each is 15 inches long, this would be 10 x 15 or 150 more inches of pipe needed. You would add 120 to 150 to get 270 inches of pipe needed in total. Again, this is just a made up example to walk you through the sort of thing you need to do for today's actual project. You need to use the counts and lengths that you are estimating for PVC2.

6. Finally, go to Tinkercad and create one of these using cylinder pieces. You do not have to make it to scale and you do not have to try to create the connectors, just use cylinder shapes to create this thing in Tinkercad.

Alternatively, if you prefer, draw a sketch of this object on a piece of paper.

7. When done, copy a Tinkercad share link and paste it into your Google Doc or take a photo of your sketch and paste it into the Google Doc. Turn in the Google Doc on the Google Classroom.