

PVC 4 project

Project Make/Make 2

Due: 4th period Zoomers: Thursday 4/29/21 midnight
4th period present at school on 4/29/21: Thursday 5/6/21 midnight

3rd period Zoomers: Friday 4/30/21 midnight
3rd period present at school on 4/30/21: Friday 5/7/21 midnight

7th period everyone: Friday 4/30/21 midnight

I created a PVC clothes drying rack (see image to the right)

I give you other pictures of it on the next page.

The rack was made with four different pipe lengths:

12 inch pipes
9 inch pipes
3 inch pipes
21 inch pipes

The rack uses the 9 inch pipes for the bottom rectangle (the part on the ground), and the 12 inch pipes for all the parts sticking out to hold clothes, and for most of the vertical pipes. The 21 inch pipes (2 of them) are the first legs, from the base up to the first drying level.

The rack uses 23 pieces of pipe total, and 18 different connectors (10 of one type, 4 of another, and then 2 each of two other types of connectors.)

Your tasks:

1. In the Google Doc attached to this assignment in the Google Classroom, fill out a parts list.

First, figure out how many connectors of what type are required to make this.

Second, figure out how many pieces of pipe of what length are needed. See notes above the different lengths of pipe used.

2. Fill out the connectors table in the Google Doc.
3. Fill out the pipe lengths table.
4. Calculate the total length of pipe required to make this. If you aren't sure what I'm asking, here is another way to say it: Let's say I'm going to buy a single long piece of pipe and cut it up into the pieces I would need to make this object. In inches, how long of a piece would I need?

Give your answer in inches.

(continued on next page)



5. 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.

6. 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 everything on the Google Classroom.

Some additional views of the rack:

