

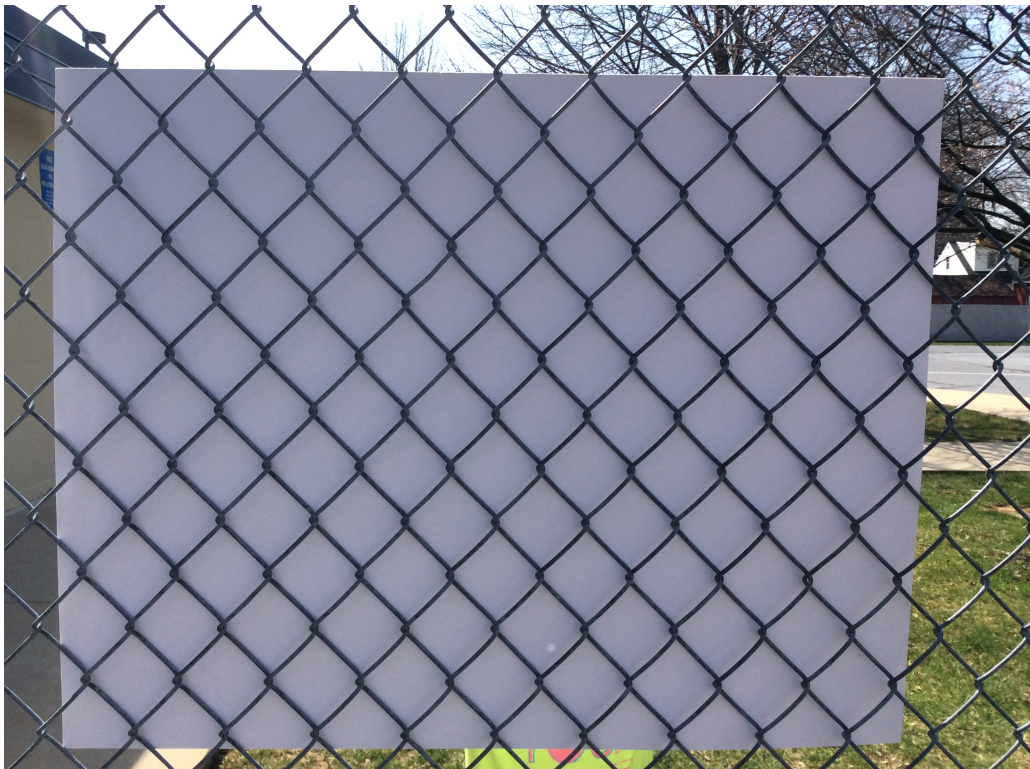
Name: _____

Area and Perimeter Fence Art Project

Your Mission:

- Create a design with multiple colors of cups that uses area below. You can work together with a partner or partners, which could give you a larger amount of space because you will add your areas together.
- Your perimeter will be calculated by measuring the outside edge of your design.
- Your workspace may be vertical or horizontal. It does not have to be the same perimeter as this picture, but the area (per person) must be the same.
- For each step of the project, your work must be signed-off by a teacher before going on to the next step.

This is the approximate amount of space you have to work with:

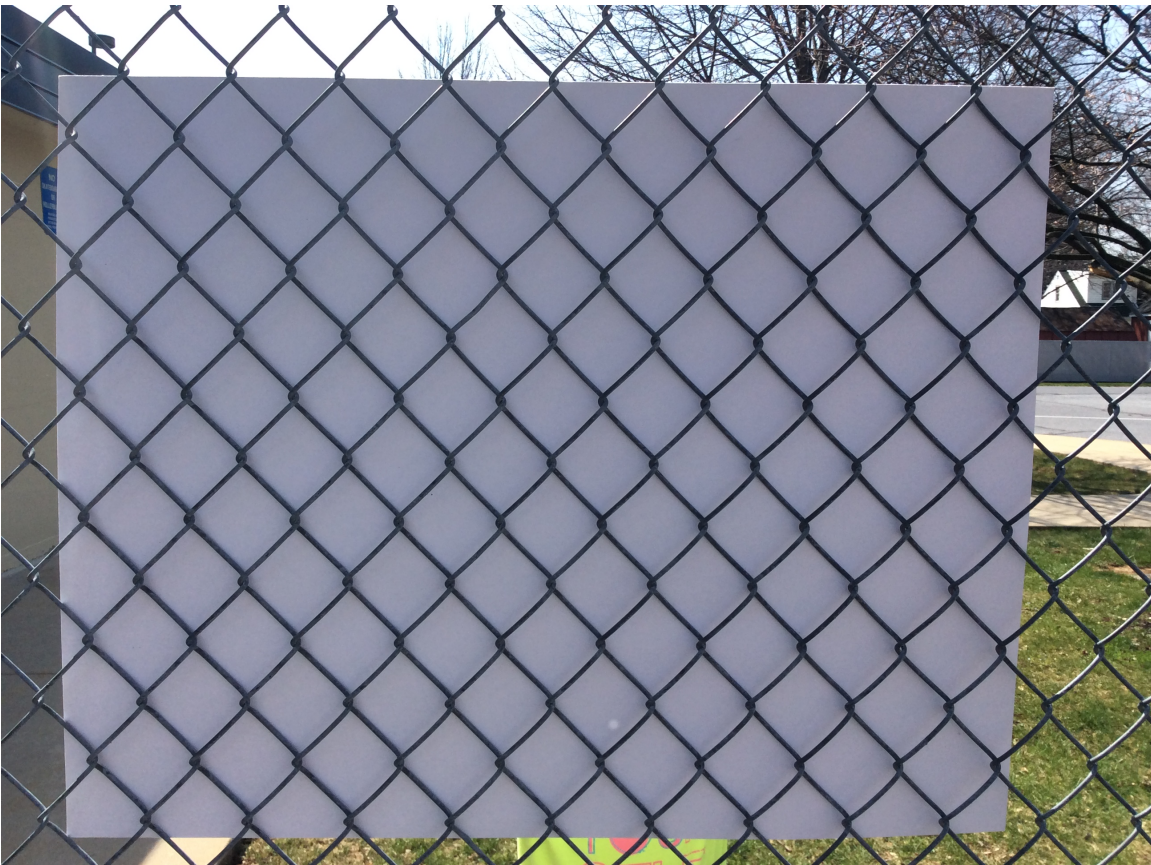


Step 1: Calculate the area of the white fence space. Show your work.



Step 2:

On the fence below, create your design with colored pencils. Be flexible with your colors, knowing that we may not have them available. OR, use the fence grid paper to create your design. Make sure your total area matches the area of step 1 even if it is a different shape.



Step 6: Create a poster to show and explain your math. This will be laminated and hung next to your design.



- Include calculations of your perimeter and area with and without the distributive property.
- Include any other calculations that you complete.
- Include an artists' statement following our guidelines.

Dear Math Parents,

We are in the midst of a rigorous chapter on area and perimeter. I find that students learn best when they can apply these measurements and calculations to real life, and I created a project to help the students do that. We will be creating mathematical murals on our playground fence using plastic cups. Here is an example:



I have already purchased a few hundred cups and I will purchase more, but I'm hoping for each student to have about 50 cups. Would you consider donating to our cause?

There are two possible ways to help:

Option 1: Purchase a package of cups and send them to school by March 30th. We need plastic cups in a variety of colors, including clear. (We already have a lot of red, white & blue.) *I purchased 16 oz cups, but 7 oz and 12 oz cups also work. 18 oz cups are too big. Cups do not have to be Solo brand, but they do need a circular base instead of square. I bought mine at Giant. Party City has tons of colors and a BOGO deal.*



Option 2: Contribute a few dollars towards our project.

Thanks in advance!