



YOUMAGINE

# sine wave vase generator

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Located at: <http://www.youmagine.com/designs/sine-wave-vase-generator>

## Short description:

Show off some complex mathematical beauty with this custom multiple sine wave vase generator.

## Description:

This openscad code and models solves the Challenge: "Eureka!" Design an object that expresses the beauty of math. With the following parameters: "Public"(used the Reverse! card) and "Complex" Sine waves combine to form beautiful super positions all over these vases. You enter values for the period of each of 5 layers and interesting super positions form between the layers. Enter numbers that have meaning to you and display this vase as a conversation piece. I made one using my name "Mark" (plus a base layer) by assigning a number to each letter based on the idea used for ASCII digital values of the characters. The vase looks amazing. You could also use a significant date, since small vases look better with layer periods under 100 you can split the year up, and add 10 as a base layer to keep the bottom smoother. For example today's date 11-14-17, with a base layer of 10 would be  $p_5=11, p_4=14, p_3=20, p_2=17, p_1=10$ , Try all prime numbers ! Try all even numbers! it's really fun. There are a lot of parameters in the code to make fascinating vases that look like crystals, for example:  $\$fn = 6$ ; thickness = 4; amplitude = 2; step = 12;

If you can, please use the online documentation found at <http://www.youmagine.com/designs/sine-wave-vase-generator> because those may have been updated. Also, there you can interact and provide praise and/or feedback.