



Quarterly Problem: Mirror, mirror on the wall...

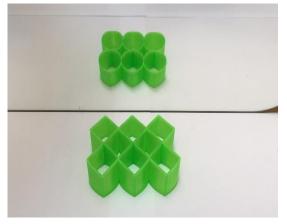
... I think you're not working properly anymore!

We all know this scenario: We don't leave the house without a critical glance in the mirror. Scientists have long since known that how we perceive our outer appearance relies mainly on seeing our reflection in the mirror. But does a mirror really accurately reflect our looks, or can even a mirror make mistakes?

The japanese engineer Kokichi Sugihara is famous for his geometric illusions. He constructed a corpus, whose reflection varied starkly from its appearence.

Brainstorm-Box

On the second page, you will find an instruction to craft the figure. With this, you can test the illusion yourself.



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Can you explain how the reflection of a rectangle can be a circle? Try describing your answer precisely, so that your answer is comprehensible.

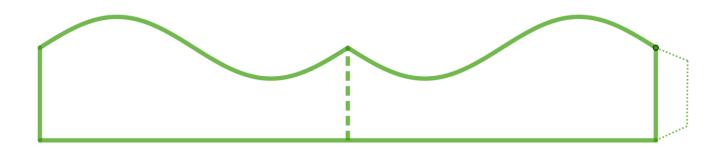
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International Centre for STEM Education (ICSE) University of Education Freiburg · Kunzenweg 21 · 79117 Freiburg icse@ph-freiburg.de · www.ph-freiburg.de/icse



Pädagogische Hochschule Freiburg



Cut the figure along the outer line. Glue the edge and fold the figure in the middle along the dotted line. Make sure that the fold and the glued end each have an angle of 45°.