**GeoGebra in the Classroom: Art Lessons**

We have commonly collected examples of maths lessons in which GeoGebra helps to deepen understanding, creates situations of discovering basic concepts by the students themselves or lead to motivating tasks that have to do with real life.

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| **Topic** | **Concrete Ideas for work with GeoGebra** |
| Perspective: parallel perspective, central perpective | Exploring the difference, constructing it instead on paper with compass and ruler      [pictures](http://www.wikiwand.com/de/Darstellende_Geometrie) |
| Gothic or romanic windows in churches | Getting to know the principles  of geometric construction like  trifoil or arches  [picture](https://de.pinterest.com/pin/375909900119598979/) |
| GeoGebra string art | String art normally is hand-craft. But it can be done also by geogebra. The advantage is that you can animate points on a (hidden circle) |
| Optical illusions and paradox figures  [Lesson plan on the internet](http://vismath.ektf.hu/TEB/FFarkasENG.pdf)  [Results of my own class](http://www.slideshare.net/euklid1/optical-illusions3-41298026) | http://shop.labbe.de/media/bt/kuz/4122-unmoegliche-figuren.jpg [picture](http://shop.labbe.de/media/bt/kuz/4122-unmoegliche-figuren.jpg) |
| Using GeoGebra as an animation tool  [Lessons plans on the internet](http://www.jensilvermath.com/2013/09/22/geogebra-as-an-animation-tool/) | Modelling annd simulating real life objects  [picture](http://www.jensilvermath.com/2013/09/22/geogebra-as-an-animation-tool/) |
| Artists who create geometric art | My [collection on pinterest](https://de.pinterest.com/ict_world/math-art-with-geogebra/)  see also [Daniel Mentrard](http://dmentrard.free.fr/GEOGEBRA/Maths/accueilmath.htm) |
| Minimal art (animated) | https://68.media.tumblr.com/b8c2b7e66d099e4772aefdab6943ce53/tumblr_nuslhsfo4p1s9h8a4o1_500.gif [picture](https://68.media.tumblr.com/b8c2b7e66d099e4772aefdab6943ce53/tumblr_nuslhsfo4p1s9h8a4o1_500.gif) |
| Islamic art  see [Classroom resources](http://www.sigd.org/resources/for-the-classroom/) in the internet | [picture](http://www.sigd.org/resources/for-the-classroom/) |
| Tesselations and the art of Escher | [picture](https://de.pinterest.com/pin/1829656068566558/) |
| Golden Ratio in Art | How to construct it? Investigation  of buildings or paintings to discover the golden ration  http://emptyeasel.com/wp-content/uploads/2009/01/golden-parthenon.jpg[picture](http://emptyeasel.com/wp-content/uploads/2009/01/golden-parthenon.jpg) |
| Fibonnacci Art Project  See [lesson plan](http://www.whatdowedoallday.com/fibonacci-art-project/) on the internet | The advantage of using GeoGebra is that the positition of the circles and be changed. The disadvantage are the colors for intersecting circles |
| Geometric art | There are many ideas related to art topics and maths  See l[ink to Google search](https://www.google.de/search?q=geogebra+painting+art&safe=off&biw=1280&bih=689&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjHvte726_RAhWEOxQKHa5ODsQQsAQIGQ" \l "safe=off&tbm=isch&q=geogebra++%22geometric+art%22) |