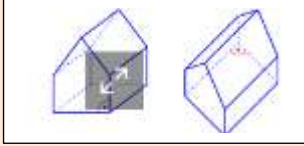
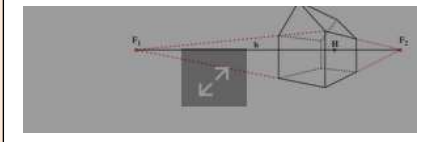

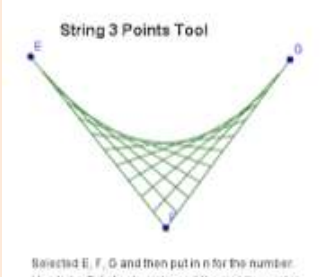
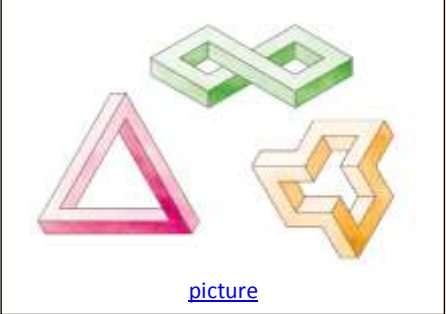

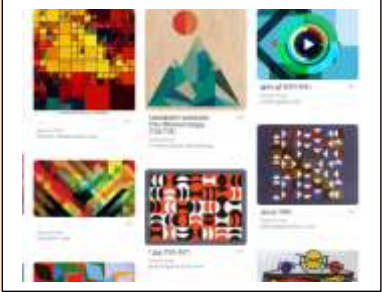


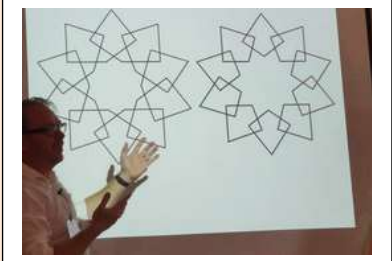





GeoGebra in the Classroom: **Art** Lessons

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.

Topic	Concrete Ideas for work with GeoGebra
Perspective: parallel perspective, central perspective	<p>Exploring the difference, constructing it instead on paper with compass and ruler</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="text-align: center;">pictures</p>
Gothic or Roman windows in churches	<p>Getting to know the principles of geometric construction like trifoil or arches</p> <div style="text-align: center;">  <p style="text-align: center;">picture</p> </div>
GeoGebra string art	<p>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)</p> <div style="text-align: center;">  </div>
Optical illusions and paradox figures Lesson plan on the internet Results of my own class	<div style="text-align: center;">  <p style="text-align: center;">picture</p> </div>
Using GeoGebra as an animation tool Lessons plans on the internet	<p>Modelling and simulating real life objects</p> <div style="text-align: center;">  <p style="text-align: center;">picture</p> </div>

<p>Artists who create geometric art</p>	<p>My collection on pinterest see also Daniel Mentrard</p> 
<p>Minimal art (animated)</p>	<p>see our worksheets an student's work</p>   <p>picture</p>
<p>Islamic art see Classroom resources in the internet</p>	<p>picture</p> 
<p>Tesselations and the art of Escher</p>	 <p>picture</p>
<p>Golden Ratio in Art</p>	<p>How to construct it? Investigation of buildings or paintings to discover the golden ration</p>  <p>picture</p>
<p>Fibonacci Art Project See lesson plan on the internet</p>	<p>The advantage of using GeoGebra is that the position of the circles and be changed. The disadvantage are the colors for intersecting circles</p> 
<p>Max Bill</p>	<p>Young students can make constructions of pieces of art from the Max Bill. A lot of pictures an be found here.</p>

Art with polygons	Ideas given by a GeoGebra-Book from Irina Boyadzhiev , especially for younger students, who start with GeoGebra
maths in art (crosscurricular)	A GeoGebra-Book that gives a lot of ideas to construct like Mondrian, Klee, Vasarely, ...
Geometric art	There are many ideas related to art topics and maths See link to Google search