



## Lesson plan structure

Name of the lesson: **Geometric patterns on traditional Romanian blouses**

<b>Prerequisites</b>	<ul style="list-style-type: none"><li>• thread and needles</li><li>• two types of cloth</li><li>• colour Pencil</li><li>• paper</li><li>• laptop</li><li>• data projector for projecting images</li></ul>
<b>Aims</b>	This course aims to highlight the diversity of traditional costumes specific to each country. Highlighting the traditional Romanian costume through the geometric symbols used to make traditional blouses - ie.
<b>Students' age</b>	13-17
<b>Steps</b>	<ul style="list-style-type: none"><li>✓ presentation: <b>Geometric patterns on traditional Romanian blouses</b></li><li>✓ discussions about geometric shapes and how they are found in the nature around us - Fibonacci sequences</li><li>✓ each country shows us a component of its traditional custom</li><li>✓ workshop - creating your own traditional blouse using geometric shapes</li></ul>
<b>Time</b>	90 minutes

## Presentation - Background information

Geometry is in existence since the year 3000 i.Hr., in the ancient civilizations of Babylon and Egypt, but it was an unnamed mathematical system. It can be concluded that the inventor of geometry came from any of these civilizations. The beginnings of geometry were marked by a collection of empirical principles related to length, angle, area and volume, which were developed to be put into practice in construction, astronomy, and other sciences.

Plane geometry is the branch of geometry that studies plane geometric figures: Point, Right hand, Semi-right, Semiplane, Plan, Segment, Angle, Polygon, Circle.

The word **dot** (from latin, punctum, "prick ") can have several connotations, these are related to its original meaning - in general something very small, without dimension and that can limit or limit.

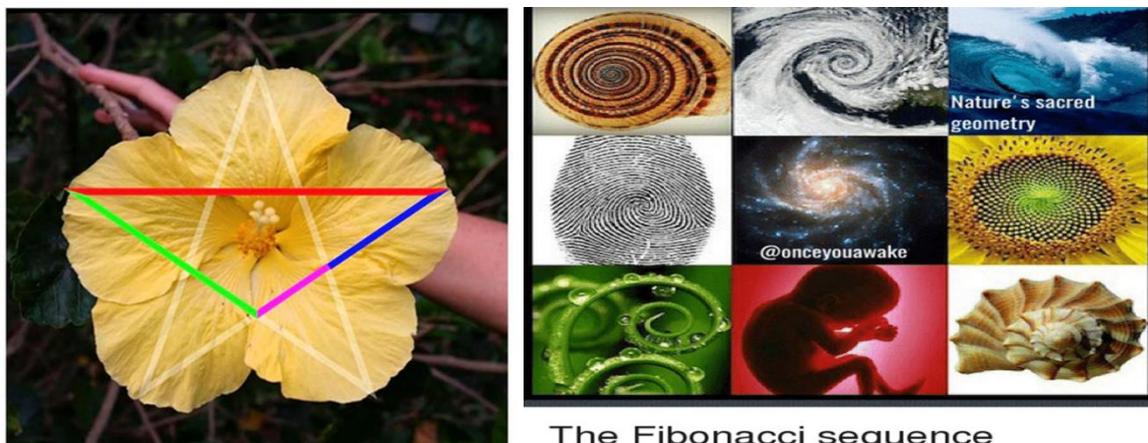
In mathematics, a line is a geometric figure that has only one dimension, the length. In Euclidean geometry, for two fixed points there is a line and only one that passes through both, the straight line being the shortest path between two points.



## Discussions about Fibonacci sequences

New information about Sacred Geometry and the Fibonacci String appeared during the video presentation. To help students understand the teacher presents them a video from the internet, trying to make the information easier to understand.

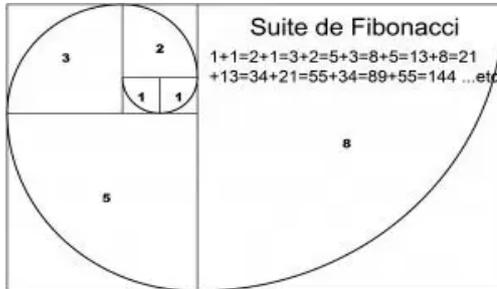
<https://www.youtube.com/watch?v=nt2OIMAJ6o>



The Fibonacci sequence



After the clarifications received, students can make connections with certain films they have watched or stories and legends they have heard about the meaning of certain geometric symbols. How we create a spiral using the Fibonacci sequences? How does math help us?



### Traditional custom

By presenting traditional costumes, students can observe the similarities but also the differences between countries. These being influenced by culture, geographical region, etc.



### Workshop - creating your own traditional blouse using geometric shapes

Students are encouraged to use their skill and imagination to create their own traditional Romanian blouse. They have patterns from different materials: paper, 2 types of canvas, thread and needles, colored pencils and some examples of geometric shapes that are found on traditional Romanian blouses.



Co-funded by the  
Erasmus+ Programme  
of the European Union

