

# Europeana Learning Scenario

## Title

**Learning from the past: The transition from the myth to the logics.**

## Authors

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## Abstract

The aim of this learning scenario is to investigate the relationship between Mathematics and Philosophy, looking for the main mathematicians who were also philosophers since the ancient Greek history to nowadays. The students have to find information from the Europeana.eu platform, create digital presentations or infographics using Canvas and share it in a Padlet created by the teachers. Also, after that, we should distribute the class in groups of five in order to practice the World Café methodology.

## Keywords

Philosophy, Mathematics, History, Communication, Logics, Science.

## Table of summary

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<b>Subject</b>	Philosophy and Mathematics.
<b>Topic</b>	Pre-Socratics and the transition from the myth to the logics and its relationship with some mathematical concepts through the logics.
<b>Age of students</b>	15 and 16 years.
<b>Preparation time</b>	3 hours
<b>Teaching time</b>	8-9 lessons
<b>Online teaching material</b>	Padlet (web where we can crate boards to present digital content), Youtube, Wikipedia, Canvas (website to create inphografics, digital posters and presentations), Jclic (a website where you can find mathematical exercises to do online), online encyclopedias, etc.
<b>Offline teaching material</b>	

### Europeana resources used

[The experimental method in the seventeenth century](#)  
[Bertrand Russell](#)  
[School of Athens](#)  
[Euclid and Ptolomeo](#)  
[Nicolas Copernicus](#)  
[Descartes](#)  
[Bertrand Russell](#)

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### Integration into the curriculum

These lessons plans are integrated at the curriculum of Philosophia and Mathematics.

### Aim of the lesson

To be aware of the importance of the use of logics and the rational thinking in the developing of our human knowledge through the history.

### Trends

STEAM learning, Collaborative learning, visual search and multimedia materials, peer learning, open source learning, cloud based learning.

### 21<sup>st</sup> century skills

Critical thinking, creativity, communication and cultural awareness.

### Activities

Name of activity	Procedure	Time
Introduction to the topic	To start, we will watch these videos to explain and introduce the context of the presocratics, Plato and Aristotle and their contribution to the science as a mathematicians and philosophers. <a href="#">The pre-Socratics</a> (Philosophy class) <a href="#">Plato and Aristotle</a> (Philosophy class) <a href="#">Zeno's paradox</a> (Mathematics class)	1-2 lessons

Name of activity	Procedure	Time
	<p><a href="#">Donald in Mathmagic Land</a> (Mathematics class)</p> <p>After that, we will explain this period of the History of Philosophy using different resources. Some of them:</p> <p><a href="#">Stanford encyclopedia</a></p> <p><a href="#">Podcasts (King's college London)</a></p> <p>Documentaries: - Genius of ancient world. Socrates. - Cosmos. Carl Sagan. Chapter VII. <i>'The backbone of night'</i>.</p>	
Investigation	<p>Students will have to do the activity <i>Who is who: 'The school of Athens'</i></p> <p>They will search more information about the figures who appear at the Raphael's masterpiece using online resources:</p> <p><a href="#">The story behind Raphael's Masterpiece 'The school Of Athens'</a> (Philosophy class)</p> <p>Mathematics class: Students will have to solve different kinds of exercises and problems related with the Greek philosophers and mathematicians:</p> <p><a href="#">Mathematics activities</a></p> <p>Finally, we will study in a general way, the contribution of modern philosophers and mathematicians as Descartes and Bertrand Russell.</p> <ul style="list-style-type: none"> <li>- <a href="#">The experimental method in the seventeenth century</a>. (Europeana.eu)</li> <li>- <a href="#">Bertrand Russell</a>. Resource obtained from Europeana.eu and Wikipedia commons.</li> </ul>	1 lesson
Digital presentations	<p>To create digital presentations or/and infographics with <a href="#">Canvas</a>.</p> <p>Resources of <a href="#">Europeana.eu</a>:</p> <p><a href="#">School of Athens</a></p> <p><a href="#">Euclid and Ptolomeo</a></p> <p><a href="#">Nicolas Copernicus</a></p>	1-2 lessons

Name of activity	Procedure	Time
<p>Padlet</p>	<p><a href="#">Descartes</a> <a href="#">Bertrand Russell</a></p> <p>Sharing the digital presentations of the investigation of each students group at the digital platform. <a href="#">What is Padlet?</a></p>	<p>1 lesson</p>
<p>World Café</p>	<p>To distribute the class in groups of 4 or 5 students. In these groups each student will have a role play. There will be two mathematicians and two Philosophers who will have to argue and dialogue about their theories. Previously to the debate, we will have studied the Socratic dialectical method with documentaries (<i>Genius of the ancient world. Socrates</i>) and Information from the textbook. <a href="#">What is a World Café session?</a></p>	<p>2 lessons</p>

### Assessment

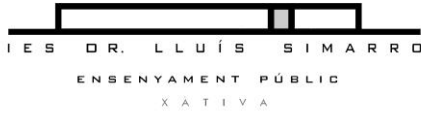
Final test with answers multiple choice.

Rubric to evaluate a digital presentation.

Peer assessment to evaluate the debate between students in cooperative groups using a rubric.

Rubric to evaluate teaching.





\*\*\*\*\* AFTER IMPLEMENTATION \*\*\*\*\*

### Student feedback

*Add here the method with which your students will be able to give you feedback and discuss the lesson.*

### Teacher's remarks

*Add here your comments and evaluation **AFTER** the implementation of this lesson. You can always use a rubric for self-assessment.*

### Annex



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