

# DECODING LIGHT: from Plato to Matrix

**Science Culture Educational Center "Aristotelio"**

Non Profit Organization

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# Abstract

The **light** can convey messages. How something is illuminated, but also how it is decoded - that is how we perceive, process and explain what is lit or shaded - creates different dimensions and realities, both true and virtual. A timeless example of the **construction of realities and their interpretation**, is the myth of Plato's Cave. The specific myth aims at mobilizing spatial awareness through the interpretation of the dimensions in space, as well as at challenging our brains and bringing up philosophical queries. In a similar way, E. A. Abbott in his book "Flatland" tries to convey the concerns arising from constructing reality, by referring to the perception of dimensions in space. "The Matrix", as a dream world, is also a virtual reality, from which the only ones who manage to escape are "the prisoners who will fight it". These comparable examples clearly show the importance of seeking the truth, through certain bi-poles: reality – illusion, two-dimensional – three-dimensional space, freedom – manipulation. The solution to all these concerns is the "revelation", the doubt of the very nature of reality, about which Plato talks initially, and Descartes later. Actually, education can transform our way of thinking from darkness to light, by seeking the truth and selecting knowledge instead of ignorance.

# Aims

Children primarily understand human brain's capacity  
for decoding / interpreting information  
and thus constructing space and dimensions  
according to how this is "illuminated" each time.

# Objectives

## **Students will be able to:**

- describe linear propagation of light and to light up their own works of art based on this.
- work with ratios – proportions and proportional – inversely proportional amounts.
- reflect and critically express themselves on light – shadow, referring to other people's philosophical ponderings.
- analyze and construct reality, creating parallelisms.
- decode the dimensions of the space surrounding them, through the perspective of illuminating and shading objects.
- develop doubts and each time to view reality with skepticism.
- express themselves through drama and visual arts on the subject of light – shadow.
- be inspired by the way objects look as they are lit up or shaded.
- express themselves through visual arts, by constructing figures for the shadow theatre, and through drama, by improvising.
- be able to make art by being inspired by art itself.
- familiarize themselves with S.T.E.A.M. methodology.
- develop critical thinking through creating their own works of art.
- actively and creatively participate in cross-curricular S.T.E.A.M. activities.
- be guided gradually to deeper learning.
- familiarize with Europeana cultural content.

# Storytelling

## General concept

A provocative comment made by a weird stranger about the credibility of films, becomes the triggering event that leads the eminent script writer and director, Walt Disney, to an attempt to get the man to ponder on the meaning of reality. During this process, he is aided by Pixar lamp(animation figure). Together, they aim to construct a shadow theatre and with the use of light, to help the stranger learn by experience. Naturally, it being the first time they have ever attempted something similar, queries, trial runs, computations.... come up! Initially, while trying to build a small test shadow theatre –before starting on a big construction -they not only get to learn about linear light propagation, but they also work with proportional and inversely proportional amounts. Despite the difficulties, they manage to build the big shadow theatre with great success. Walt even chooses the children's story "The tickler" as the most appropriate one to be performed at the theatre, as it is about dreams, which is in fact what Descartes pondered on in his first philosophy. And while everything is going according to plan, things start getting intense again! Walt, the film director, invites the weird stranger to the reality found backstage, behind the screen. He accuses Walt of trying to deceive him! At that point, Descartes starts talking, adding his own philosophical ideas on reality, as well as the myth of Plato's Cave to what the two heroes are saying. The ensuing conversation, together with an important text, lead to new films, "Flatland" and "The Matrix". And it is then, that all the above-mentioned examples are connected to each other, with great symbolism about the bi-pole reality-illusion, in the three-and two-dimensional space created by light and explained in Flatland. In the end, when that weird man who initially challenged Walt has become his avid fan, Pixar lamp sabotages the show by turning off its light. A loud voice is suddenly heard, saying something that leads to new ways of seeing reality...

Walt Disney is a well-known script writer and director.

As he is having his coffee one day, a stranger comes by and asks him pompously:

*-Are your movies real Walt?*

*-Why are you asking this? Is your living world real?, he sharply replies.*

*-What do you mean? Is it all a lie?*

*-Haven't you heard about 4<sup>th</sup> dimension?, Walt says with confidence.*





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He suddenly looks at some wall paintings, depicting sunrays, which bring cave's myth to his mind which he had heard the other day.





"What is that?", the stranger wonders.

His ignorance is a great challenge, so Walt decides to explain it to him.

Words won't be enough...

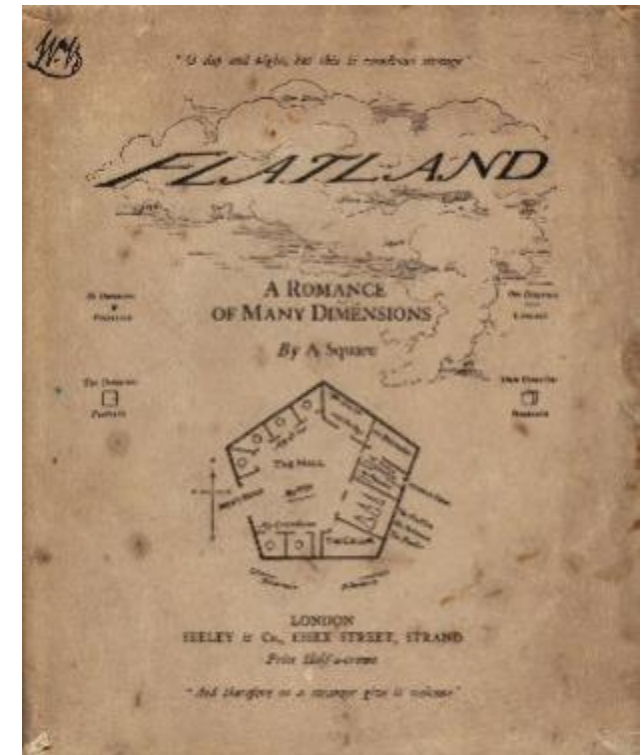
He rushes home and runs into the cellar.

In his grandfather's trunk he may find something helpful...

"Flatland - a romance of many dimensions" is just in front of his eyes!

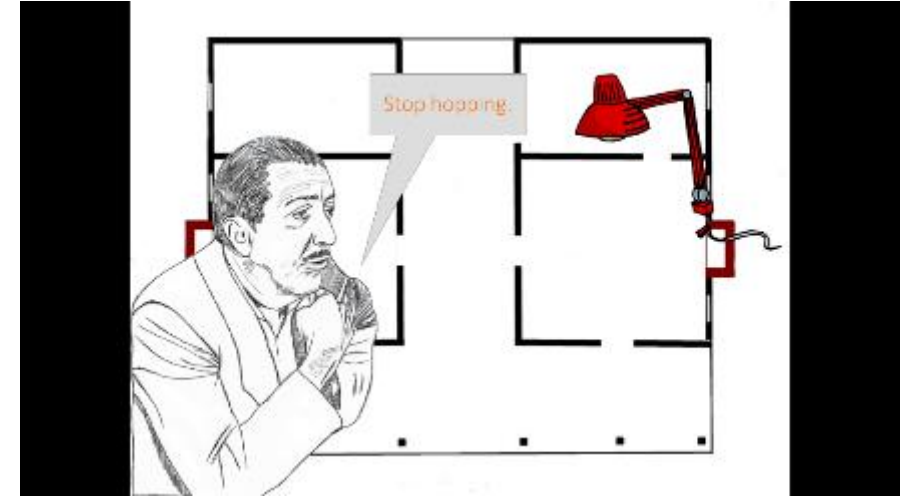
He has been amazed by space lands for so long..!

However, he needs something more tangible, more convincing right now...





He calls his friend, Pixar, who has so many creative ideas...



She arrives quickly, but... she doesn't seem so eager to help...

Running and hopping all over, she irritates Wall, who can't concentrate!

He starts chasing her, trying to calm her down.

Pixar seems to have so much fun, and she happily turns on and off, still running around the place..!

He comes really close to her, when he... notices something that gives him a great idea!

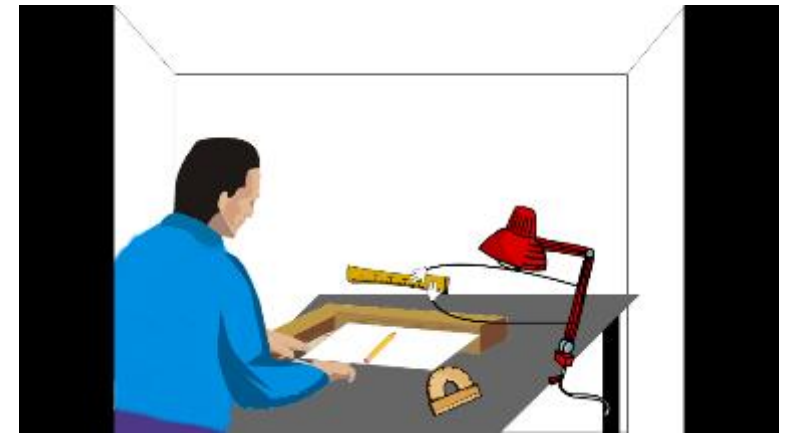


The moment he almost touches her, his shadow is created on the wall...

*"I have got it!", he shouts out! "A shadow theatre! That's it!"*

So, he opens his computer to look for ideas in Europeana's collections, where he finds Karagiozis' shadow theatre.





However, there are many technical issues to solve first.

How can he build it? He hasn't constructed something like this before, what to say in such a scale..!

It will be wise to give it a try on a small construction. He immediately starts to construct!

Pixar is his assistant now, calmer than before, as she understands that a new idea is been put into practice.

He starts to design... a small paper for the wall, a lamp to illuminate and... in between them whatever can replace his hand.

A couple of hours later the construction is ready.

- *Can I light?* , Pixar said.
- *Wait! We have to test which is the best position to light from?*, Walt replies, while many questions pop on his mind. *Where should light source be? Where should the actors stand? How should they move? Where should the theatre props be? ...*



*"If the small paper is 50\*70cm, how big should the real screen be for the performance?", Walt wonders, and quickly begins to calculate, so excited!*

- *Should I call the actors?* , Pixar shouts with great excitement.
- *Not yet Pixar, methodical Walt replies, let's try it first on the small construction, and then we can call them. Besides, we know who they will be. Don't be upset. Bring me the list with their measurements, please. We have to make their shadow puppets first.*

Pixar hasn't done something like that before. *"Their shadow puppets? What???"*.  
Well, she trusts Walt on these matters.



Walt and Pixar have done a good job so far.

- *Do we know which script we will use for our play Walt?, Pixar asks.*

A couple of minutes later, he responds:

- *"The Tickler"! He suits our goal perfectly Pixar! It talks about dreams... but also about children and laughing...! Man finds real meaning in children's world, and not in adult's.*

- *The tickler? I don't know him...*

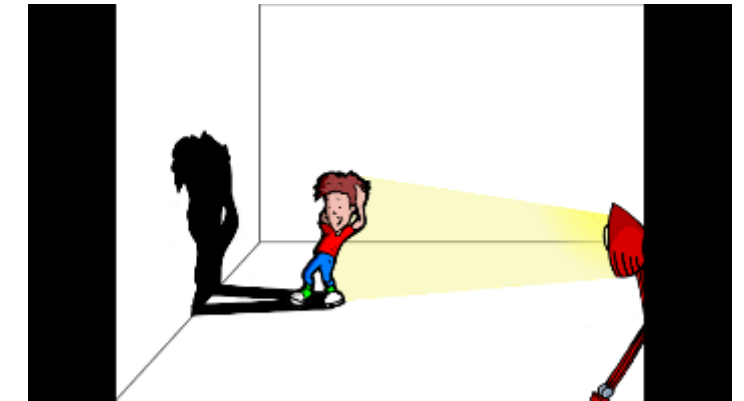
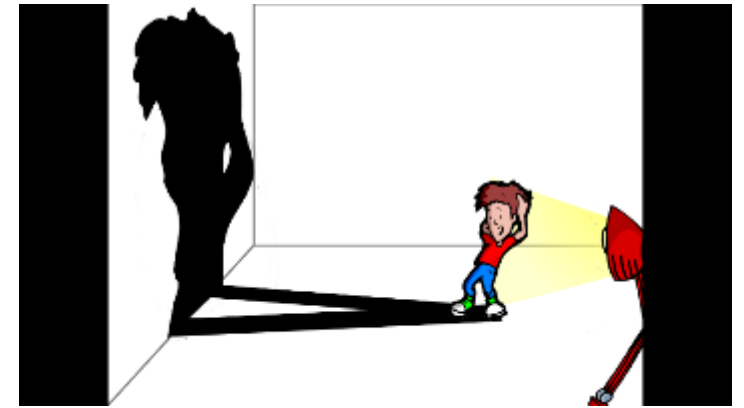
- *Listen then... , and he starts narrating ...*

- Pixar, I have wanted to work on the Tickler for so long....at last!!  
Ops, wait a minute, our actors are all of similar size. The Tickler is taller though than kids.  
What are we going to do? A great director, like me, cannot mess it up!

So now, Walt needs to check the actors' movements using the small figures on the small construction.

Absorbed in his thoughts, he is sure that he will find a solution. Moving a small figure between the light source and the paper, he notices that something is changing. Its shadow... gets smaller and bigger....

Why is that happening? Can that be helpful?







As long as Walt has figured out what is going on with the shadow's size, everything is ready. First, he has to calculate how many workers will be needed for the big shadow theatre. He wants to announce it to the public in time. Pixar has heard that 2 efficient workers can construct such a big structure in 20 days. Walt definitely wants to have the performance on stage on the day of his good friend's Descartes birthday, on 31<sup>st</sup> March. There are only 5 days left till then tough! How many good workers does he need so as to be ready until then?



Indeed, 5 days later everything is ready!  
Walt and Pixar are so beside themselves  
with joy!  
They put up the big screen, put the props  
into place and the actors are ready too.  
Pixar lights so so brightly!!



During the performance, the audience is excited!

As the actors are acting, Walt calls the curious stranger forth, to take a look behind the screen.  
He is surprised when he realizes that shapes didn't look the same from the front as from behind it.  
Behind the screen there are just people wearing masks!

- *Masks? So, it's all a deception?*, he says looking at Walt full of wonder.
- *Not exactly my friend*, he answers.

But, before he finishes his sentence, the man addresses the audience in a loud voice:

*"Ladies and Gentlemen, behold a deceiver! He has tricked us!"*

That is when Descartes, who is watching the show, stands up to protect his friend Walt... Descartes is very well known for his skepticism and his doubts concerning the nature of reality.

So, full of confidence he repeats Plato' s words, that lead people to doubt everything they see.



*"A sensible man would remember that the eyes may be confused in two ways, and for two reasons - by a change from light to darkness, or from darkness to light."*

(Plato, The Republic).

He starts talking to the crowd about Plato's Cave Myth.

*"Which is the connection between the cave you are talking about and the deception that is set up here?"*, a man asks.

Looking from him to the apparently flustered audience, Descartes understands that they haven't been educated to think in this specific way and it is very difficult for them to understand the meaning of the myth. So, he sits near Walt and begins to explain it to everyone.

Walt adds "Flatland - a romance of many dimensions" as another similar example, and they all together talked about their connection.

After some hours and a lot of questions, Descartes stands up, approaches Walt and gives him a present...

*"The Matrix through Plato's and Descartes' looking glass"*



When reading it, Walt has so many ideas about a new film...!

*"I absolutely have to call Wachowski brothers! They will love it, we can cooperate! It could begin with..."*, he whispers to himself.

- *What are you whispering?*, Pixar asks.
- *"Matrix"*, he replies.
- *What are you talking about?*
- *"Matrix"* is the name of the new movie Pixar!

*Thanks to Descartes and Plato. And also the Tickler as well as our shadow theatre. And first of all, thanks to the light Pixar, the light!, Walt shouts cheerfully.*



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*"Congratulations Walt! You have really attempted to free human thought through your performance! Today all those all will leave having **learned to think differently, doubt more** and experience much more freedom than yesterday, and they will have found a light to guide them..."*, Descartes tells Walt.



- *Thank you for helping me to understand that I can create different worlds, says the stranger that has become an eager supporter of Walt Disney!*
- *Keep in mind that even the 3 dimensions might not be reality. There may be others apart from them, Walt says.*

Suddenly, Pixar turns off, sabotaging the 3<sup>rd</sup> dimension behind the screen... and a voice can be heard:

***"Don't be afraid of what you cannot see!"***

# Project's Units



# Light through Paintings – Chiaroscuro Technique

Subjects: Geometry, ICT - smartphone, Arts, Technology

## Aim

Decode 3 dimensions' reality depiction in the framework of dimensions, as in paintings, analyzing Chiaroscuro Technique.

## Short Description

Starting from Europeana collections, we discuss the way light is used on various paintings.

## Indicative Tasks

### **1<sup>st</sup> Primary Education (ages 5-8 y. old)**

- Figure drawing and lighting from different viewpoints.

### **2<sup>nd</sup> Primary Education (ages 9-12 y. old)**

- Using a light torch, students lighten their face, making selfies, observing and discussing on the outcome respectively on each case.
- Searching in Europeana' s collections for relevant material.



# Indicative Photos from the implementation of tasks



# Light Properties - Light / Dark

Subjects: Mathematics, Sciences, Arts, ICT, Technology

## **Aim**

Get in touch and conceive light properties concerning propagation of light and experiment with them.

## **Short Description**

Students approach the sense of light as active participants, through specific properties that define it (ray / bunch, self-luminous / hetero-illuminated objects, linear propagation, shadow creation, diffusion, reflection).

## **Indicative Tasks**

- Script, scenario, video ("Following the Light") made by Aristotelio team for unit's purposes.
- Experimental tasks in order to approach light properties.
- Searching in Europeana's collections for material related to specific light properties. **\*Appendix 2**



# Indicative Photos from the implementation of tasks



# Shadow theater - Rene Descartes

Subjects: Sciences, Literature, Arts, teaching English as a 2<sup>nd</sup> language, ICT, Technology, Philosophy

## Aim

Approach meanings of reality and non-reality (the way that reality's perspective passes through experience into dream world).

## Short Description

Through children's literature, students approach the meaning of dreams and the way it is approached via Descartes' philosophy.

## Indicative Tasks

### **1<sup>st</sup> Primary Education (ages 5-8 y. old)**

- Children Literature – Theatrical Play – Fiction – Creation and Implementation of Shadow Theatre performance.

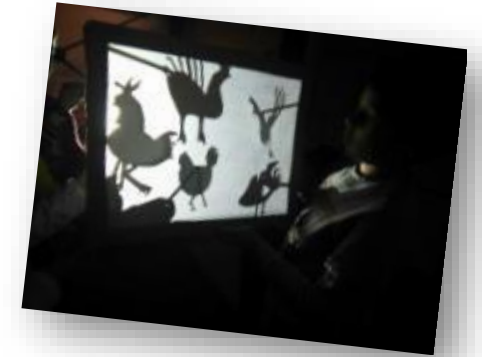
### **2<sup>nd</sup> Primary Education (ages 9-12 y. old)**

- Searching in Europeana's collections for information concerning life and philosophy of Descartes – Creation and Implementation of Shadow Theatre performance.





## Indicative Photos from the implementation of tasks



# Plato, Allegory of the Cave

Subjects: Arts, Philosophy, Technology

## Aim

Conceive that light and shadow symbolize knowledge and ignorance respectively.

## Short Description

Based on Europeana's collections, Plato's Cave Myth is displayed, specifically referring to social classes of his ideal state.

## Indicative Tasks

### **1<sup>st</sup> Primary Education (ages 5-8 y. old)**

- Theatrical Roleplaying (guards, prisoners, philosopher)

### **2<sup>nd</sup> Primary Education (ages 9-12 y. old)**

- Debate – Fishbowl Technique (guards, prisoners, philosopher)
- Searching for relevant material in Europeana's collections.



## Indicative Photos from the implementation of tasks





# Flatland

Subjects: Science, Arts, Technology, teaching English as a 2<sup>nd</sup> language

## Aim

- Familiarize with spatial dimensions.
- Conceive that light and darkness shades could create the 3<sup>rd</sup> dimension.
- Construct metacognitive skill of cognitive transfer on dimensions' progression.

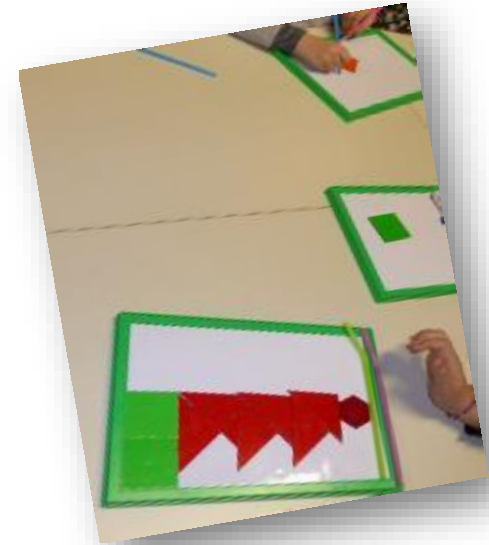
## Short Description

Based on Edwin Abbott's book *"Flatland - a romance of many dimensions"* as well as Wassily Kandinsky's work, the way it is provided in Europeana's collections, we approach the meaning of dimensions (point, 2 dimensions, 3 dimensions, as well as children's attempt to imagine 4<sup>th</sup>, 5<sup>th</sup>, etc. dimension).

## Indicative Tasks

- Playing with a Painter: Recognition and discovery of the world of dimensions in Wassily Kandinsky's work. (2 dimensions)
- Creation and searching geometrical levels through palpation. (3 dimensions)
- Searching in Europeana's platform for relevant material.

## Indicative Photos from the implementation of tasks



# Matrix

Subjects: Philosophy, teaching English as a 2nd language, Sciences

## Aim

- Reflect and critically express themselves on light – shadow, referring to other people's philosophical ponderings.
- Analyze and construct reality by creating parallelisms.

## Short Description

Parts of animation movie (Greek public TV) based on “Flatland” book are shown.

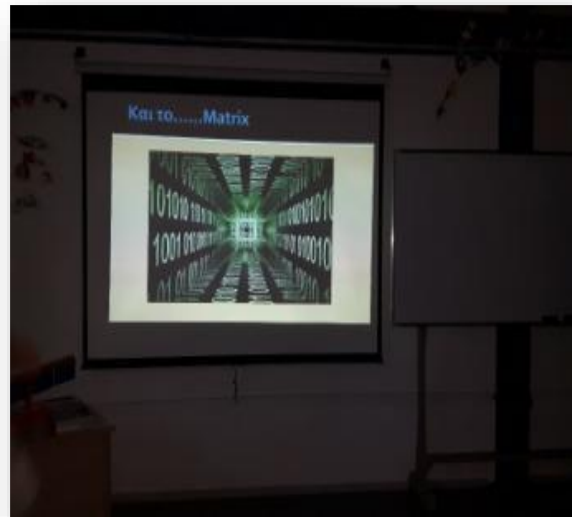
As an extension of dimensions’ world, parts of “Matrix” movie are also shown in order to make connections with Plato’s Theory, Descartes and Flatland.

## Indicative Tasks

### **2<sup>nd</sup> Primary Education (ages 9-12 y. old)**

- Treasure Hunt game with riddles relevant to all previous units that lead to a text that connects Plato with Descartes and Matrix.
- Display of “Matrix” movie parts.
- Critical overall discussion of the project pointing symbolism between light-darkness / knowledge-ignorance / space dimensions

# Indicative Photos from the implementation of tasks



# Appendix 1

Unit 1	Title of resource	Author/Institution	URL of resource
Light through Paintings	The Milkmaid	Johannes Vermeer	<a href="https://www.europeana.eu/portal/en/record/90402/SK_A_2344.html?q=vermeer">https://www.europeana.eu/portal/en/record/90402/SK_A_2344.html?q=vermeer</a>
Light through Paintings	Girl with a Pearl Earring	Johannes Vermeer	<a href="https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_670.html?q=Meisje+met+de+parel+">https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_670.html?q=Meisje+met+de+parel+</a>
Light through Paintings	Self-portrait	Rijn, Rembrandt van	<a href="https://www.europeana.eu/portal/en/record/90402/SK_A_4691.html?q=Rembrandt">https://www.europeana.eu/portal/en/record/90402/SK_A_4691.html?q=Rembrandt</a>
Light through Paintings	Militia Company of District II under the Command of Captain Frans Banninck Cocq, Known as the 'Night Watch	Rijn, Rembrandt van	<a href="https://www.europeana.eu/portal/en/record/90402/SK_C_5.html?q=Rembrandt">https://www.europeana.eu/portal/en/record/90402/SK_C_5.html?q=Rembrandt</a>



# Appendix 2

Unit 2	Title of resource	Author/ Institution	URL of resource
Light Properties	Rays of Light	Karl Nordström	<a href="http://www.europeana.eu/portal/el/record/2064116/Museu_ProvidedCHO_Nationalmuseum_Sweden_25473.html?q=light+ray">http://www.europeana.eu/portal/el/record/2064116/Museu_ProvidedCHO_Nationalmuseum_Sweden_25473.html?q=light+ray</a>
Light Properties	The Reedy Marge	Emerson, Peter Henry	<a href="https://www.europeana.eu/portal/el/record/92037/http_www_bl_uk_onlinegallery_onlineex_earlyphotos_other_zoomify54016_html.html?q=reflection+light">https://www.europeana.eu/portal/el/record/92037/http_www_bl_uk_onlinegallery_onlineex_earlyphotos_other_zoomify54016_html.html?q=reflection+light</a>
Light Properties	Star Maps	Garbin, Aleksandar	<a href="https://www.europeana.eu/portal/el/record/2026011/MMSU_2295_1_3_.html?q=reflection+light">https://www.europeana.eu/portal/el/record/2026011/MMSU_2295_1_3_.html?q=reflection+light</a>
Light Properties	View of Delft	Johannes Vermeer	<a href="https://www.europeana.eu/portal/el/record/2021672/resource_document_mauritshuis_92.html?q=reflection+light">https://www.europeana.eu/portal/el/record/2021672/resource_document_mauritshuis_92.html?q=reflection+light</a>
Light Properties	Still Life with Lighted Candle	Pieter Claesz	<a href="https://www.europeana.eu/portal/el/record/2021672/resource_document_mauritshuis_947.html?q=reflection+light">https://www.europeana.eu/portal/el/record/2021672/resource_document_mauritshuis_947.html?q=reflection+light</a>
Light Properties	Troops moving up at eventide - men of a Yorkshire regiment on the march	National Library of Scotland	<a href="https://www.europeana.eu/portal/el/record/9200316/BibliographicResource_3000092750509.html?q=sun+rays">https://www.europeana.eu/portal/el/record/9200316/BibliographicResource_3000092750509.html?q=sun+rays</a>
Light Properties	Sunset over the Sea, Nassau	Cook Sir Francis	<a href="https://www.europeana.eu/portal/el/record/2048087/ProvidedCHO_Jersey_Heritage_JHT_1984_00831.html?q=sun+rays">https://www.europeana.eu/portal/el/record/2048087/ProvidedCHO_Jersey_Heritage_JHT_1984_00831.html?q=sun+rays</a>
Light Properties	Sunset behind my Studio, Manor Park, St Helier	Cook Sir Francis	<a href="https://www.europeana.eu/portal/el/record/2048087/ProvidedCHO_Jersey_Heritage_JHT_1984_01232.html?q=sun+rays">https://www.europeana.eu/portal/el/record/2048087/ProvidedCHO_Jersey_Heritage_JHT_1984_01232.html?q=sun+rays</a>
Light Properties	Following the Light	Aristotelio Team (script, scenario, video)	



# Appendix 3

Unit 3	Title of resource	Author/Institution	URL of resource
Shadow theater - Rene Descartes	Η ιστορία της δυτικής φιλοσοφίας σε 100 χαϊκού	Βλαβιανός Χάρης	<a href="https://www.europeana.eu/portal/el/record/2048050/Athena_Plus_ProvidedCHO_BiblioNet_172592.html?q=greek+descartes">https://www.europeana.eu/portal/el/record/2048050/Athena_Plus_ProvidedCHO_BiblioNet_172592.html?q=greek+descartes</a>
Shadow theater - Rene Descartes	René Descartes	Henke Johannes	<a href="https://www.europeana.eu/portal/el/record/2064108/Museu_ProvidedCHO_M_nzkabinett_Staatliche_Museen_zu_Berlin_1808491.html?q=rene+descartes+cogito">https://www.europeana.eu/portal/el/record/2064108/Museu_ProvidedCHO_M_nzkabinett_Staatliche_Museen_zu_Berlin_1808491.html?q=rene+descartes+cogito</a>
Shadow theater - Rene Descartes	René Descartes	National Library of Denmark	<a href="https://www.europeana.eu/portal/el/record/92023/BibliographicResource_2000068837174.html?q=rene+descartes">https://www.europeana.eu/portal/el/record/92023/BibliographicResource_2000068837174.html?q=rene+descartes</a>
Shadow theater - Rene Descartes	Kopf eines Ausländers	Museum Kunstpalast, Düsseldorf	<a href="https://www.europeana.eu/portal/el/record/2064114/Museu_ProvidedCHO_Digitales_Kunst_und_Kulturarchiv_D_seldorf_345243.html">https://www.europeana.eu/portal/el/record/2064114/Museu_ProvidedCHO_Digitales_Kunst_und_Kulturarchiv_D_seldorf_345243.html</a>
Shadow theater - Rene Descartes	Figure of Karagiozis Shadow Theatre	Μελίδου Κεφαλά Γλυκερία	<a href="https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_3376.html?q=shadow+theatre">https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_3376.html?q=shadow+theatre</a>
Shadow theater - Rene Descartes	Figure of Karagiozis Shadow Theatre	Μελίδου Κεφαλά Γλυκερία	<a href="https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_3417.html?q=shadow+theatre">https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_3417.html?q=shadow+theatre</a>
Shadow theater - Rene Descartes	Figure	Ioannis Kokkoris	<a href="https://www.europeana.eu/portal/el/record/2048210/1999_17_0025.html?q=shadow+theatre">https://www.europeana.eu/portal/el/record/2048210/1999_17_0025.html?q=shadow+theatre</a>
Shadow theater - Rene Descartes	Shadow theatre "Karagiozis at the folk life Museum" performed by Christos Stanissis	Άγνωστος δημιουργός	<a href="https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_12588.html?q=shadow+theatre">https://www.europeana.eu/portal/en/record/2064929/aggregator_edm_LEMMTH_000043_11533_12588.html?q=shadow+theatre</a>
Shadow theater - Rene Descartes	Ljubljana Puppet Theatre 2017 Virginija Volk play	Ljubljana Puppet Theatre	<a href="https://www.europeana.eu/portal/el/record/2020108/https_www_culture_si_en_File_Ljubljana_Puppet_Theatre_2017_Virginija_Volk_play.jpg.html?q=shadow+theater">https://www.europeana.eu/portal/el/record/2020108/https_www_culture_si_en_File_Ljubljana_Puppet_Theatre_2017_Virginija_Volk_play.jpg.html?q=shadow+theater</a>

# Appendix 4

Unit 4	Title of resource	Author/Institution	URL of resource
Plato, Allegory of the Cave	Philosophers: twenty portraits of classical thinkers. Engrav	J.W. Cook, 1825.	<a href="https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006664.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006664.html?q=socrates+plato</a>
Plato, Allegory of the Cave	Sixteen portraits of classical poets and thinkers. Drawing,	The Welcome Library	<a href="https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0009100.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0009100.html?q=socrates+plato</a>
Plato, Allegory of the Cave	Bustes van Plato en Socrates	Matham Theodor	<a href="https://www.europeana.eu/portal/el/record/90402/RP_P_OB_23_336.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/90402/RP_P_OB_23_336.html?q=socrates+plato</a>



# Appendix 5

Unit 5	Title of resource	Author/Institution	URL of resource
Flatland	Flatland a romance of many dimensions	Edwin Abbott Abbott	<a href="https://www.europeana.eu/portal/en/record/9200143/BibliographicResource_2000069298428.html?q=flatland">https://www.europeana.eu/portal/en/record/9200143/BibliographicResource_2000069298428.html?q=flatland</a>
Flatland	Wassily Kandinsky	Wassily Kandinsky	<a href="https://www.europeana.eu/portal/en/search?f%5BTYPE%5D%5B%5D=IMAGE&amp;page=4&amp;q=Wassily+Kandinsky+&amp;view=grid">https://www.europeana.eu/portal/en/search?f%5BTYPE%5D%5B%5D=IMAGE&amp;page=4&amp;q=Wassily+Kandinsky+&amp;view=grid</a>

# Appendix 6

Unit 5	Title of resource	Author/Institution	URL of resource
Matrix	Another Apocalypse to Enjoy: The Matrix through Plato's and Descartes' Looking Glass	Hulpoi Claudia	<a href="https://www.europeana.eu/portal/el/record/9200418/BibliographicResource_3000125913701.html?q=matrix+plato">https://www.europeana.eu/portal/el/record/9200418/BibliographicResource_3000125913701.html?q=matrix+plato</a>
Matrix	Το σύμπαν που αγάπησα, 02 Η μαγεία της 4ης διάστασης	Αρχείο Δημόσιας Ελληνικής Τηλεόρασης	<a href="https://www.youtube.com/watch?v=BWmko2V44P0">https://www.youtube.com/watch?v=BWmko2V44P0</a>
Plato, Allegory of the Cave	The School of Athens: a gathering of renaissance artists in the guise of philosophers from antiquity, in an idealized classical interior.	G. Mochetti after Raphael	<a href="https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006662.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006662.html?q=socrates+plato</a>
Plato, Allegory of the Cave	The School of Athens: a gathering of renaissance artists in the guise of philosophers from antiquity, in an idealized classical interior.	G. Ghisi of Mantua, 1540, after Raphael.	<a href="https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006663.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006663.html?q=socrates+plato</a>
Plato, Allegory of the Cave	The School of Athens: a key to the figures in the compositio	G. Volpato, after Raphael.	<a href="https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006664.html?q=socrates+plato">https://www.europeana.eu/portal/el/record/9200105/wellcome_historical_images_V0006664.html?q=socrates+plato</a>

# THANK YOU

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