

**Erasmus+ Qualified Generations,  
2022-1-SK01-KA220-SCH-000087555**

Salme sulander,  
principal

<https://youtu.be/4ItWpVe-Wcw>

# Greetings from Martinlaakso High School, Finland



Vantaa  
Martinlaakson lukio



located in Vantaa, near Helsinki

520 students and 31 teachers

3 different lines of studying:



- Main High School line: languages, history, art, economics etc.

- Mathematics + Natural Science (developing these subjects in Finland)



- Drama and Theater

great atmosphere, nice teachers, good food...

# Examples of STEAM-lessons, team Finland





# Leave the classroom, study on the spot





# The golden ratio in arts



Erasmus+

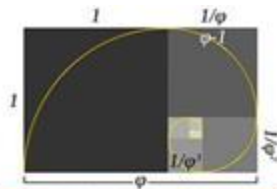
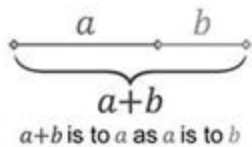


Heli  
Groschup



# Golden ratio in architecture



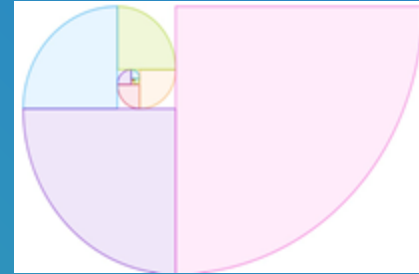
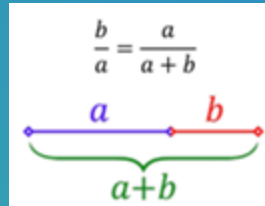


Golden ratio  
in nature +  
mathematical  
approach



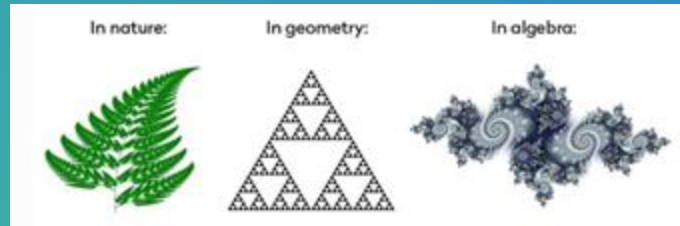
Golden spiral

Golden ratio

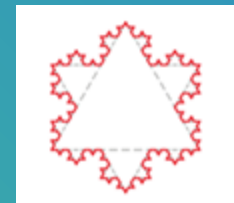
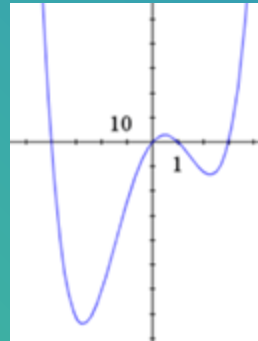


Fractals

Von'Koch  
Snowflake



Golden ratio and 4  
grade polynomian  
funktion  
connections







# Chemical garden like growth of crystals

**Target group:**  
high school students

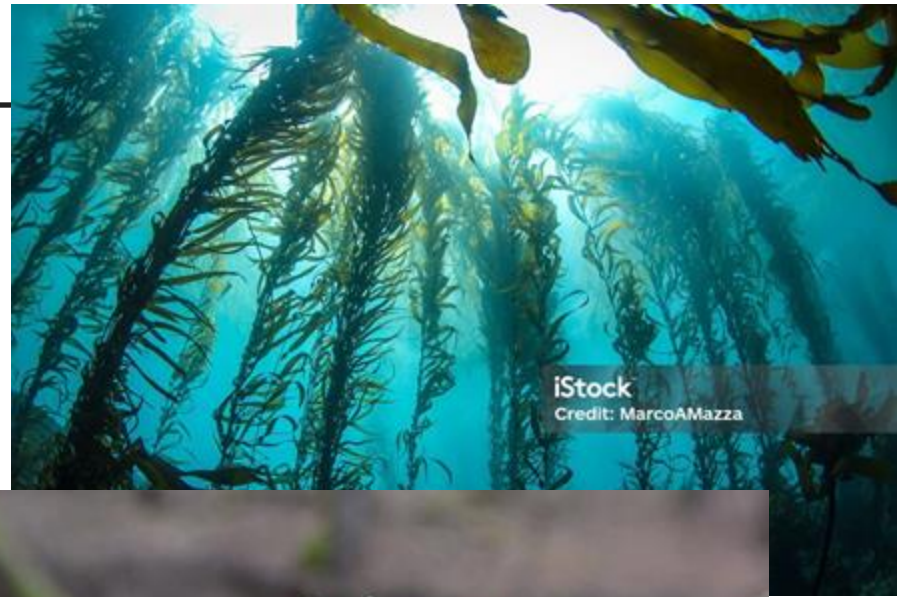
Duration: 30-45 min



# Is it really chemistry?!?

## Or is it biology?

## Or is it art?



# Thank you for your interest!

on behalf of Martinlaakso High School  
principal

Salme Sulander

