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ARTS TALK ABOUT US

ERASMUS+ KA219 2017-2020

ITALIAN WORKSHOP

WHO WAS LEONARDO?

(Montiglio Ilaria
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BENETÚSSER MEETING
13/05/2019 – 17/05/2019

GENERAL PRESENTATION

The activity is focused on the computational thinking and on coding that are universal languages. The children have to follow a code, move a robot in the grids and find the pieces of a puzzle . When they collect all the pieces of the puzzle, they discover a facet of Leonardo Da Vinci personality. At the end they complete a poster sticking every puzzle and the titles on a poster.

PLAN

TARGETS:

- understand a code and program a robot used simples instructiones
- know better Leonardo da Vinci

RECIPIENTS: 24 children (or less) divided in 6 group

TIME: one hour

PLACE: a classroom without desks and chair

EQUIPMENT:

- 3 poster with grids made by 5x5 squares
- 6 robots abled to move forward, turn left (90°) and turn right (90°) or something that can be moved by children in the same way (in this activity we use some pieces of lego duplo)
- 6 pictures, divided in 4 pieces, about the facets of Leonardo Da Vinci personality:
  - Anatomist
  - Cartographer
  - Engineer
  - Musician
  - Painter
  - Perfectionist
- 6 codes
- 6 papers with the titles of the facets of Leonardo
- 1 paper with the title of the activity and the date of Leonardo born and dead
- 1 poster
- stick glue

TEACHER INVOLVED: three, one of each grid

PREPARATION

1. Make three grids on three posters with 5x5 squares *(if you use robots in this activity, the size of each square has to be big like the robot and must allow the move of it)*

2. Decide the position of each piece of puzzle for each team

			2 A	
> A		4 B		
	2 B		1 A	3 A
				< B
3 B	1 B		4 A	

> is the start point of team A
< is the start point of team B

3. Write the code to reach them and print three code A and three code B

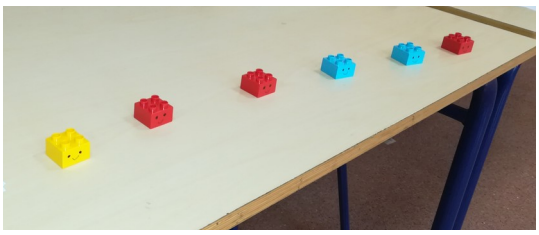
TEAM A

1	↑	↑	↑	→	↑					
2	→	↑	→	↑	↑	→	↑			
3	↑	→	↑	↑						
4	→	↑	↑	↑	←	↑	↑	←	↑	↑

TEAM B

1	↑	↑	↑	←	↑					
2	←	↑	←	↑	↑	←	↑			
3	↑	←	↑	↑						
4	←	←	↑	↑	↑	↑	→	↑	↑	→

4. Make the face on the pieces of lego duplo.



5. Find the pictures about Leonardo, print them and cut them in four parts. (*The pictures are in the appendix)*

6. Write on six papers the titles about the six facets of Leonardo and the title of the activity.

ACTIVITY

Divide the children in six groups (four per group at maximum) and named three af them *Team A* and three of them *Team B*. Give one grid every two groups (one A and one B).

Give one robot (piece of lego duplo) to each group and ask the children to give a name to the robot.

Put the robot on the grid in the start square.

Explain to the children how the robot can move on the grid:

- ↑ = move forward
- ← = turn left (90°)
- → = turn right (90°)

  NOTA BENE: *It's important that children understand that the robot move only when it is the move forward arrow because when they have to turn they have to stay in the same square.*

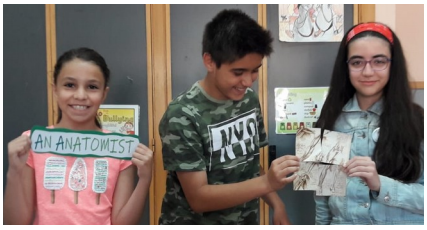
Give to each team the paper with the code.

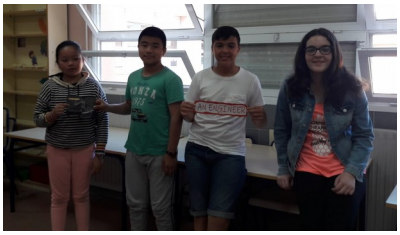
Ask the teams to read the first line and to move the robot in the grid to reach the first piece of puzzle.

Check if the move is right (even if it's not right, they can't have the piece of puzzle).

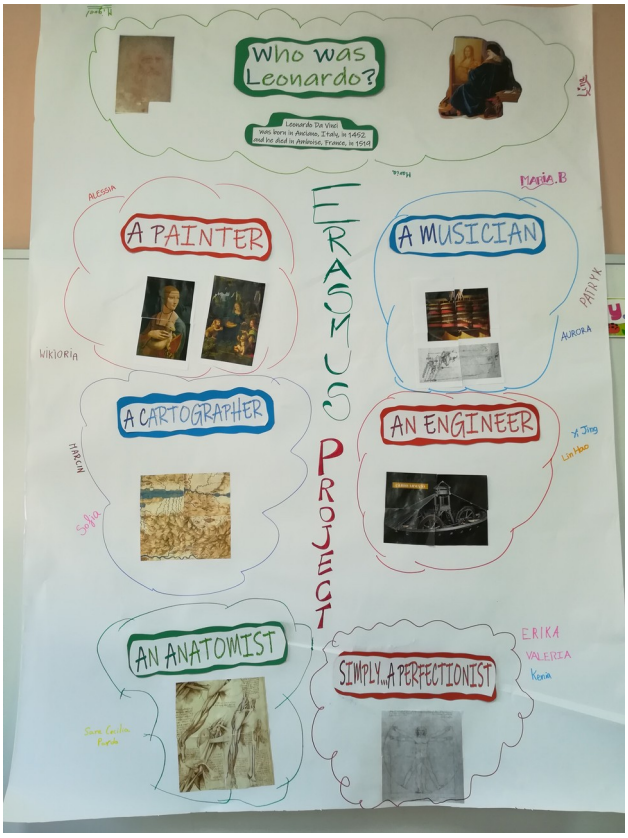
Continue with the other three lines and have a check to find a possible bug. (If there are some bugs, ask to the team to go in the start square and start again from line 1).

When the children collect every puzzle pieces, ask to them to find the right title according to the picture they have made.





Stick every puzzles and titles on a big paper.

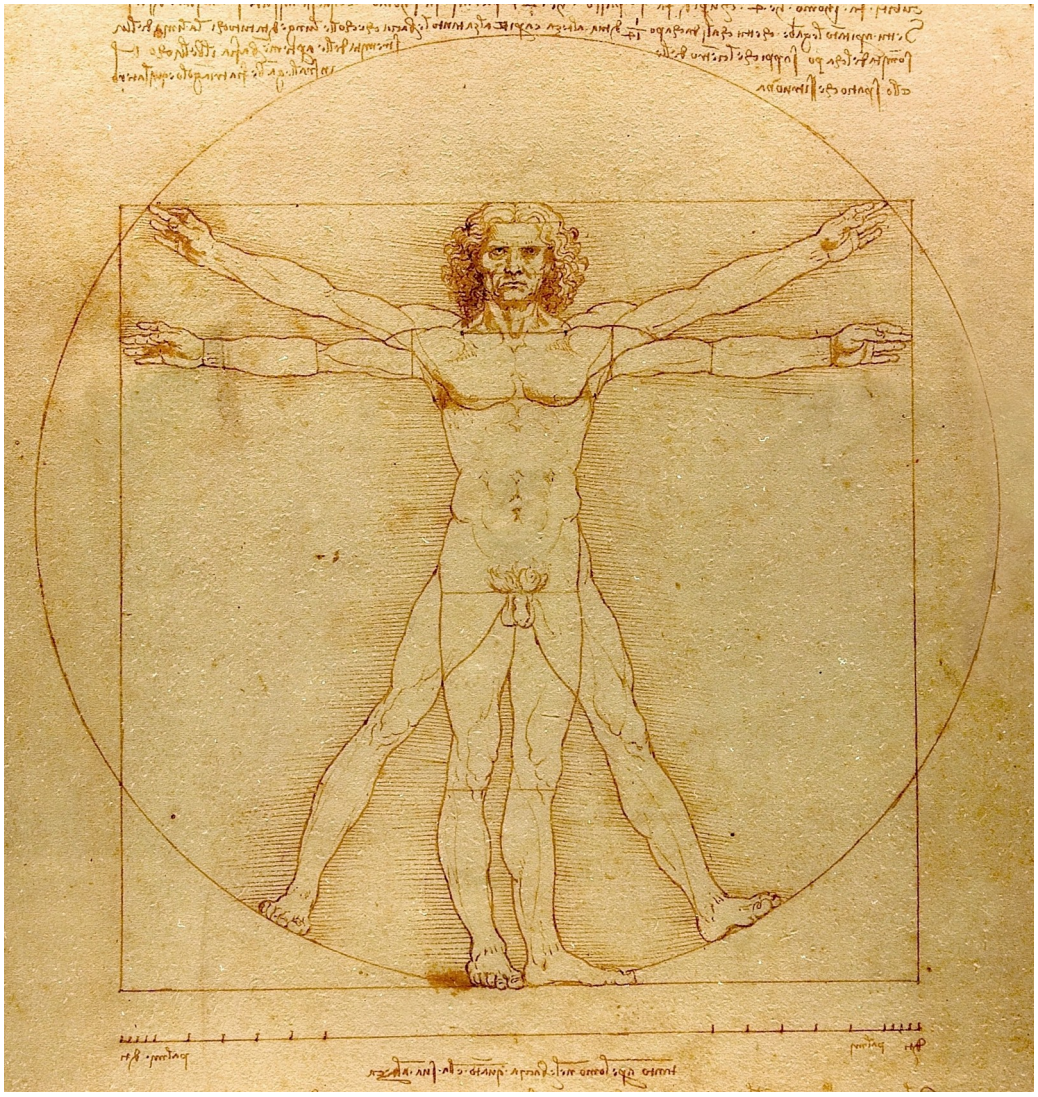


APPENDIX

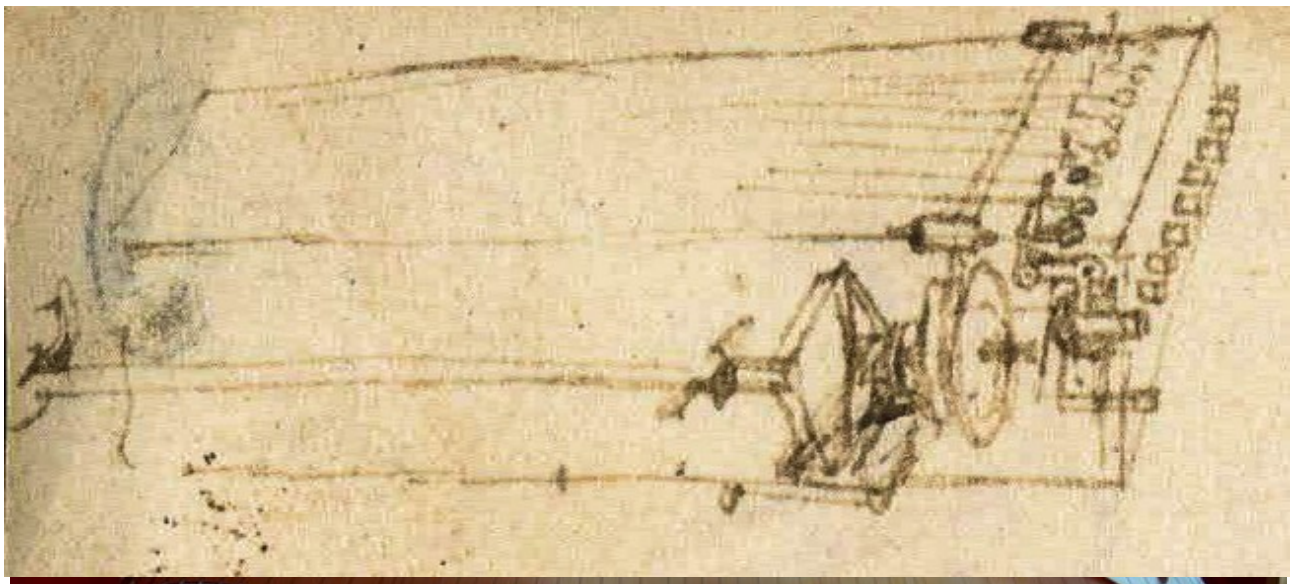
Picture to print and cut to have the puzzle

ANATOMIST

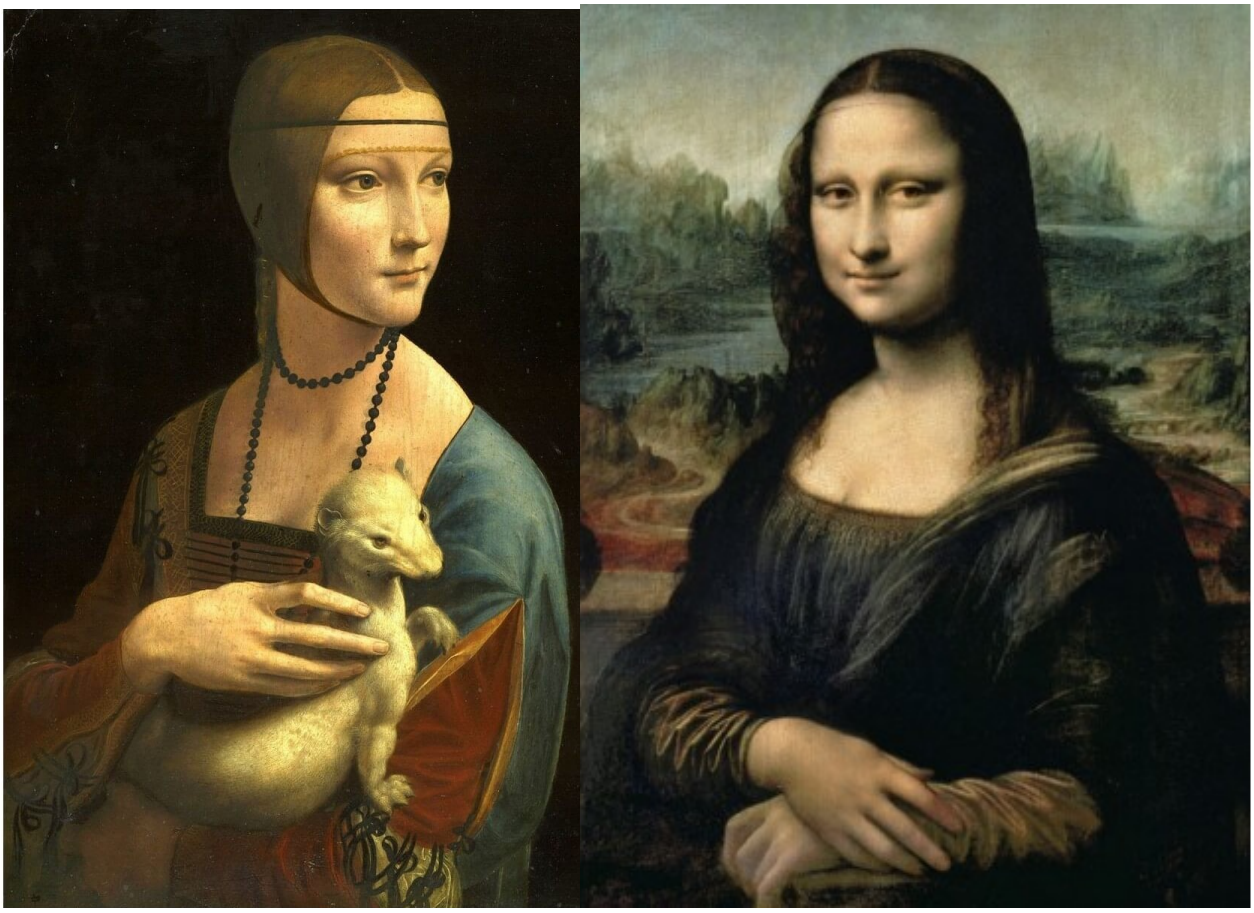
PERFECTIONIST



MUSICIAN



PAINTER



CARTOGRAPHER

ENGINEER