

Scripts for the films about the apps of the story *The polyhedron carousel* (15-19+)

All the games begin and end in the same way:

Beginning

The initial image is projected during 5 seconds. The title includes: the name of the app (for instance "Mirror Maze"), the mathematical subject -- "Symmetry", the corresponding age-group -- "15-19+", and a link to the app in the repository -- "https://...".



Ending

Background: black screen. White text displayed:

- Mathina Project with the UE logo;
- · List of partners with the corresponding logos;
- The educator's repository address.

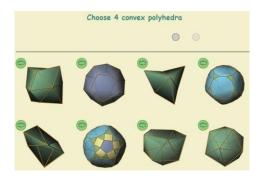




Scripts for the films about the apps:1

Game 1, Separating convex polyhedra

1. **Background**: a static image of the app.



Simultaneously, the following voice-over is heard:

"This is the app "Separating convex polyhedra" from the story "The polyhedron carousel"".

Then, the following voice-over is heard:

"While in the technician's office, Mathina and Leo are introduced to a new "class" of polyhedra: the convex polyhedra.

The aim of this game is precisely to select the convex polyhedra from among a set of polyhedra."

2. A screen recording is projected showing someone solving the app. Voice-over:

"You can choose a polyhedron by clicking on it. After choosing 4 polyhedra, you should press this button."

There are 2 rounds: in all of them, you must choose all the convex polyhedra.

If in doubt about one polyhedron, you can click . Then, a rotating image of that polyhedron is presented. To stop the rotation, press . Now, if you want, you can rotate the polyhedron manually. To go back to the main menu, you just need to close the window.

¹ The text in italic represents the content of the voice-over.





If, at one point, you make a mistake and select wrong polyhedra, you can go back by clicking And then you can correct your answer."



3. **Background**: the medals awarded at the end of the game. **Voice-over**:

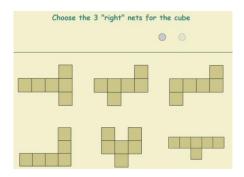
"In this game, I've received one gold medal and one silver medal."

4. Screen recording. Voice-over:

"With this app, in a playful and interactive way, it is possible to identify the convex polyhedra."

Game 2, Choosing the right nets for the cube

1. **Background**: a static image of the app.



Simultaneously, the following voice-over is heard:

"This is the app "Choosing the right nets for the cube" from the story "The polyhedron carousel"".

• Then, the following **voice-over** is heard:

"While in the technician's office, Leo makes a new discovery: it is possible to draw nets of six squares in such a way that, when you fold them, you create a cube.

The aim of this game is precisely to select the right nets for the cube."

A screen recording is projected showing someone solving the app. Voice-over:

"You can choose a net by clicking on it. After choosing 3 nets, you should press this button ${igwedge}$.

There are 2 rounds: in both of them, you must choose all the right nets.





If, at one point, you make a mistake and select wrong nets, you can go back by clicking 🥌 . And then you can correct your answer."



3. Background: the medals awarded at the end of the game. Voice-over:

"In this game, I've received a gold medal and a silver one."

4. Screen recording. Voice-over:

"Which tools are available in the program?

- this button () allows you to see the corresponding net being transformed into a cube, by folding it. To stop the animation, press . To go back to the main menu, you just need to close the window;
- this button () restarts the game;"
- 5. Screen recording. Voice-over:

"With this app, in a playful and interactive way, it is possible to identify "good" nets for a cube."

