

THE HANDMADE PROJECTOR

Age: 11- 15 years old

Number of students: 10-25

STEAM subject: Properties of light: Refraction

Link to the school curriculum/syllabus: Physics, Optics

Key question: What is the connection between our eye, the Camera Obscura, and the projector?

Brief description

The aim of this workshop is to help children study the connection between their vision and Camera Obscura, i.e. the first camera, understand how it works and the features in common of the camera and the projector. They will become familiar with the refraction phenomenon and then they will build a projector; in groups they will make a hand-made projector, using a smart mobile phone as a source of light for projection.

Finally, after experimenting with their construction, they will take pictures of their material which they will then present in class and they will refer to the specific characteristics of the projector, concerning quality and way of projection.