

Grades 5 - 8

Duration: 20 min

Tools: one 9 pcs Set / 1 to 4 students

Individual / Pair / Group work

Keywords: Light, Shadow

Optics



PHYSICS



LOGIFACES
METHODOLOGY
Erasmus+

TEACHER

Logifaces

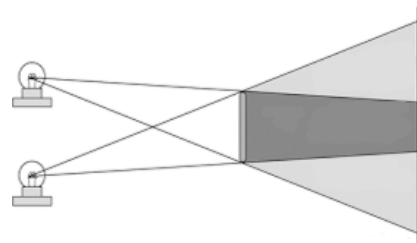
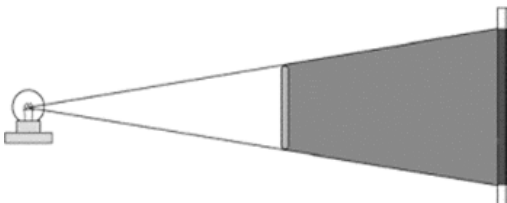
2019-1-HU01-KA201-0612722019-1

DESCRIPTION

1. Examine the shadow of a point light source (e.g. phone torch)
 - a. What do the shadows look like that you can create with it?
 - b. What happens to the shadow when you move the block towards or away from the light source?
 - c. How does the shadow change when you change the angle of the light source?
2. Examine the shadow of an extended light source (e.g. 2 phone torches)
 - a. What do the shadows look like that you can create?
 - b. What happens to the shape of the shadow when you move the blocks towards or away from the light sources?
 - c. How does the shadow change when you change the angle of the light sources?

SOLUTIONS / EXAMPLES

1. one light source: you can see the block casts a sharp shadow, which gets bigger when you move the block away from the light source
2. two light sources/extended light source: you can see a dark shadow (core shadow) and lighter shadows (partial shadow), which also change by moving the block.



PRIOR KNOWLEDGE

None

RECOMMENDATIONS / COMMENTS