

Activity: Virtual image

Problem: The emperor Palpatine in Star Wars, Michael Jackson in concert, many shows use know holographic technic. How does it work?

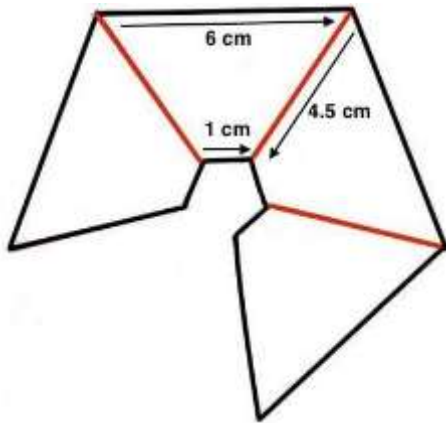
A) Pepper ghost

An hologram represents a 3D image floating in the air. How can you obtain a hologram?

Experiment 1 : Virtual image

- Place yourself in front of the window of the room what do you see? Do it again with the light of your phone.
- Describe your observations.
- How to define a virtual image?

Experiment 2 : Construction of an « hologram »



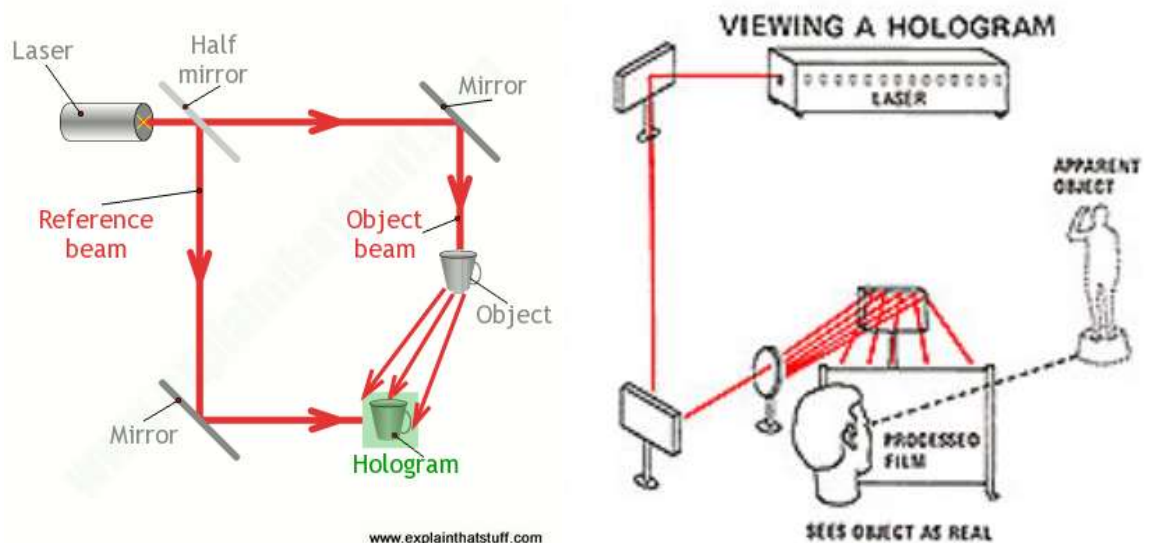
- Draw the template
- Cut and fold the pyramid with transparency film
- Place it on the center of the video.

Example of video: <https://www.youtube.com/watch?v=9pan7fgDkxY>

Oral activity : Create a tutorial video so children can do it at home and understand how it works.

B) What's really an hologram ?

Document 1 :



To go farther:

<https://www.youtube.com/watch?v=LhYyyLd5ZTg>

C) Optical illusions

TASK : Chose an optical illusion to present to your classmates.