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# HOST

HANDS-ON SCIENCE TOURNAMENT  
FAMILY EDITION

# CREATE YOUR OWN SHADOW ART

Create your own 2D shadow art by placing any objects in between a wall and light source

## **MATERIALS TO BE USED**

1. Light Source - Torch light, Mobile light, Candle or any other focus lights
2. Art objects - Any readily available objects can be used





## BRAINSTORM & DESIGN

Take a sheet of paper and write what shadow 2D art you want to create. Then sketch the rough outline on the sheet of paper (if you are allowed, sketch your design on the wall to exact size of your required output)

1. If your art requires straight lines or curved lines, what kind of objects will you bring into make those lines?
2. If you want some big square on the wall, and you don't have any object of that size, how will you bring it?
3. Is there any difference in placing the objects at different distances from the light source and wall?
4. How will you make sure that one shadow of an object does not disturb the shadow of another object?



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## **BUILD, TEST, EVALUATE & REDESIGN**

Fix the position of your light source at a certain distance from the wall (for example 2 mtrs) and project the light on the wall. Draw the design on the wall using a very light pencil as big as you want. Now place the objects you have collected make out the shape you have drawn.

You might find the following difficulties while doing the art.

1. Size of the shadow is not big enough, move the object closer to light source, this will increase the size of the object, by obstructing more light
2. If one object hinders the light on other object, switch positions of the objects such that the small object gets the light first and big object gets it after.

## TAKE IT TO NEXT LEVEL

- > You have made a silhouette art of a monument or a person doing an activity. Now try to get some lights between the object, not just the outline but some details inside it.
- > What will happen if you keep a second light source to add more details?
- > Try to make more art and connect them with a story.





## WHAT TO SUBMIT

- > A video Less than 1 minute explaining how you made the shadow art (in the language you are comfortable with). You can also build a story.
- > Two pictures of the shadow art
- > Picture of Materials that you had used

## HOW OUR JUDGES WILL SCORE

- > Based on the image that you had planned and the image you created. Our Judges will compare both and score it accordingly
- > Based on your creativity in shadow art
- > Based on the family effort



## HOW TO SUBMIT

### METHOD 1:

1. Share your experience in your facebook and instagram profile
2. Upload photos and videos of the challenge
3. Don't forget to tag our page - [@ologyhost](#)
4. Use the hashtag [#HOSTFamilyEdition](#)

### METHOD 2:

1. Share your experience with photos and videos to the mail id [familyedition@ologyhost.org](mailto:familyedition@ologyhost.org)



## **ENGINEERING IN ACTION**

Shadows are used in a flow visualization technique called shadowgraph. Where flow cannot be seen just through naked eyes. Bullets, missiles flow visualization is tested using shadowgraph Techniques.

