CLASS-10 PHYSICAL SCIENCE PERIOD PLANS

CHAPTER: 03 – REFLECTION OF LIGHT BY DIFFERENT SURFACES

PERIOD PLAN-12: Archimedes sto

Archimedes story & Making of solar cooker

Content Analysis	Class Room Environment	Teaching Learning Material
Archimedes story: Archimedes burned ships using mirrors.	Conversation: about Archimedes. Explanation: About the short history of Archimedes.	Photos related.







Making of solar cooker

A concave mirror focuses parallel sun rays at the focal point of the mirror. So with a small concave mirror we can heat up and burn Paper. In the same way make a big concave mirror to heat up a vessel. Make a wooden/ iron frame in the shape of TV dish. Cut acrylic mirror sheets in to 8 or 12 pieces in the shape of isosceles triangles with a height equal to the radius of dish antenna. The bases of 8 or 12 triangles together make the circumference of the dish. Stick the triangle mirrors to the dish. Our solar heater/cooker is ready. Arrange it so that concave part faces sun. Find its focal point and place a vessel at that point. It will get heated. We can even cook rice in that vessel!

Applications of mirrors:

Concave mirror is used as reflectors in torch, motor vehicles, search lights, shaving mirrors, solar furnaces. It is used by dentists and ENT doctors to see the magnified images. Convex mirrors are used as rear view mirrors. It is used in hair pin bend on the roads to view the images in turn. **Conversation:** about the making of a solar cooker. nagamurthy.weebly.com **Model making:** If possible try to make a model solar cooker.



Parabolic card board shape

Acrylic glass sheet

Conversation: the uses of convex and concave mirrors.

Related photos

NAGA MURTHY- 9441786635 Contact at : <u>nagamurthysir@gmail.com</u> Visit at : nagamurthy.weebly.com