



OUR OWN HIGH SCHOOL, AL WARQA'A, DUBAI

SUBJECT : PHYSICS – HOLIDAY HOME WORK

ACADEMIC YEAR : 2011-2012

GRADE : 10

General Instructions :

1. Make the project on A-4 sheets and file them neatly in one folder.
2. Hand written work will be given more weightage than the printed one.
3. Be creative and resourceful while doing the activities.
4. Sequence of Project –
 - a) First page showing name of the student, subject, topic and session.
 - b) Second page showing resources followed by purpose, aim and other details while doing the project.
 - c) Draw / Paste pictures related to the project.
5. Choose any one of the following projects. Complete the assignment and submit to the teacher before 15th September 2011.

Prepare the project based on following:-

Project 1 : Solar Energy

The sun floods the earth with enough solar energy in one hour to power the entire world. Infact, the sun provides more energy in one day, than the annual cumulative requirement of 6 billion people on the planet! Present a detailed information about the following:

- 1) Construction and working of a solar cooker . [A model of a solar cooker is also preferred]
- 2) Discuss the advantages and limitations of using solar cooker.
- 3) Designing of solar cells and the principal advantages of solar cells.

Project 2 : Ocean Energy

The ocean can produce two types of energy: *thermal energy* from the sun's heat, and *mechanical energy* from the tides and waves. Ocean thermal energy is used for many applications, including electricity generation. Presentation a detailed information about the following:

- 1) Electricity generation from tides and waves.
 - 2) OTEC – Ocean Thermal Energy conversion technique utilized in generation of electricity.
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