



Delhi Public School Srinagar

LESSON PLAN

Session 2015-2016

Class : IX
Subject : Physics
For the Month(s) of : September
Theme : *Work and energy*
Periods : *Theory (10)*

OBJECTIVES (CONCEPTS & SKILLS): :

- *Basic concept of work*
- *Types of work(positive, negative, and zero work done)*
- *Concept of energy, and forms of energy*
- *Types (kinetic and potential energy) and their derivations*
- *Concept of power and its units*
- *Commercial unit of energy*
- *Textbook Numerical problems related to the topic.*

The teacher will keep the following skills in view:

- *Scientific Aptitude*
- *Thinking skills*
- *Reasoning Skills*
- *Attentiveness*
- *Listening Skills)*

LEARNING OUTCOMES :

- *Make it sure that the student learns the concepts given*

- Basic concept of conservation energy and its importance.
- Terms related to energy like B.O.T.U, Commercial unit(KWH),etc.

INSTRUCTIONAL TOOLS & REFERENCES: *In addition to general teaching tools like white board, marker, etc, the teacher will use different electrical gadgets like fan, bulb etc with power rating to understand rate of energy consumption.*

The References used will be :

- i. *Dinesh Super simplified science(physics) by S.K Sharma*
- ii. *Science and Technology Text Book for class IX.*

PEDAGOGY: :

- i. *Activating Prior Knowledge by Random Questioning*
- ii. *Introducing the topic to be taught after getting the expected response from the students.*
- iii. *Developing hypothesis by (a) Lecture , (c) Discussion and (d)In Text Questions*

ACTIVITY/ASSIGNMENT/PROJECTS:*The teacher will give Home Assignments and the areas of assessment will be:*

Content of Knowledge, Presentation, Correctness, Time Management and Thinking skills

ASSESSMENT:

- i. *Divide the students in the class in groups and ask them to Explain at least three examples of transformation of energies in our daily life.*
- ii. *Remind the students about the various types of work and ask them to give one example of each type of work.*
- iii. *Group Discussion*
- iv. *In Text Questions*

FA₃& SA₂ SYLLABUS :

FA Syllabus:

- *Basic concept of work and its types*
- *Energy and derivation of kinetic and potential energy.*
- *Concept of Power and commercial unit of energy .*
- *Textbook Numerical problems related to the topic.*

SA Syllabus: Same as FA



Delhi Public School Srinagar

LESSON PLAN

Session 2015-2016

Class : IX
Subject : Physics
For the Month(s) of : August
Theme : *Flotation.*
Periods : *Theory (10) and Practical (3)*

OBJECTIVES (CONCEPTS & SKILLS):

- *Basic concept of thrust and pressure*
- *Concept of Archimedes' principle and its applications.*
- *Concept of buoyancy and buoyant force*
- *Elementary idea of density and relative density.*
- *Textbook Numerical problems related to the topic.*

The teacher will keep the following skills in view:

- *Scientific Aptitude*
- *Thinking skills*
- *Reasoning Skills*

LEARNING OUTCOMES :

- Make it sure that the student learns the concepts given.
- To know difference between thrust and normal force
- How to calculate pressure and its variations with altitude and depth.
- Relationship between ship designing and Archimedes' principle.
- Concept of floating and sinking of objects with relation of buoyancy
- To know relation between density and relative density
- To know how to find relative density of unknown substance.

INSTRUCTIONAL TOOLS & REFERENCES: *General teaching tools like white board, marker.*

The References used will be :

- i. *Dinesh Super simplified science(physics) by S.K Sharma*
- ii. *Science and Technology Text Book for class IX.*

PEDAGOGY :

- i. *Activating Prior Knowledge by Random Questioning*
- ii. *Introducing the topic to be taught after getting the expected response from the students.*
- iii. *Developing hypothesis by, (a) Lecture , (b) Discussion and (c) In Text Questions*

ACTIVITY/ASSIGNMENT/PROJECTS: *The teacher will give Home Assignments and the areas of assessment will be:*

Content of Knowledge, Presentation, Correctness, Time Management, and Thinking skills

ASSESSMENT:

- i. *Ask the students to give applications of Archimedes' principle.*
- ii. *In Text Questions*
- iii. *Numerical problems related to the topic.*

FA₃& SA₂ SYLLABUS :

FA Syllabus:

- *Thrust and pressure*
- *Archimedes principle and its applications.*
- *Buoyancy and buoyant force.*
- *Relative density*