



INDIAN SCHOOL DARSAIT



DEPARTMENT OF CHEMISTRY

Subject: Chemistry Topic : Hydrogen Date of Worksheet: 4.2.2019		
Resource Person: Rohitha		Date of Submission: _____
Name of the Student: _____ Class & Division: XI Roll Number: _____		
1	Name a hydride that can act as a) a Lewis acid b) Lewis base.	1
2	Compare the structures of H ₂ O and H ₂ O ₂ .	2
3	Explain giving reasons: a) Ionic hydrides are frequently used to remove traces of water from organic compounds. b) Heavy water is used in nuclear reactors c) Liquid hydrogen is used as a rocket fuel. d) Ice floats on water. e) Water has a higher boiling point than expected. f) Hard water does not lather easily with soap. g) Zeolite purified water is not de-ionised. h) H ₂ O ₂ is stored in wax-lined brown coloured bottles.	1 each
4	Give any two methods of preparation of H ₂ .	2
5	How will you show that H ₂ O ₂ is a powerful oxidizing agent?	2
6	Differentiate between a) Hydrolysis and hydration using suitable examples. b) hard water and soft water c) permanent hardness and temporary hardness	3
7	Discuss the different types of hydrides with examples.	3
8	Compare the principle and method of softening of hard water by a) ion exchange method b) synthetic resin method	3
9	Explain the following with equations a) Coal gasification b) Water gas shift reaction c) Clark's method	3

