Revision Notes on Hydrogen:

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∘ ¹H₁: Protium, Most abundant in nature

 $\circ \ ^2H_{1:}$ Deuterium (D), Component of heavy water.

 \circ $^{3}\text{H}_{1}$: Tritium (T), Radioactive in nature

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2.

3.

4.

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$$\begin{split} &2C_{_{17}}H_{_{35}}COONa\left(aq\right) + M^{2*}\left(aq\right) \to \\ &\left(C_{_{17}}H_{_{35}}COO\right)_{2}M \downarrow + 2Na^{*}\left(aq\right); \, M\, \text{is Ca/Mg} \end{split}$$

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$$2H_2SO_4(aq) \xrightarrow{\quad \text{electrolysis} \quad} H_2S_2O_8\left(aq\right) + H_2(g)$$

$$H_2S_2O_8(aq) \xrightarrow{\quad 2H_2O\quad} 2H_2SO_4(aq) + H_2O_2(aq)$$

$$2\text{-ethyl anthraquinol} \underbrace{\stackrel{O_2(\text{air})}{\longleftarrow}}_{H_2(Pd)} (oxidised \, product) + H_2O_2$$

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