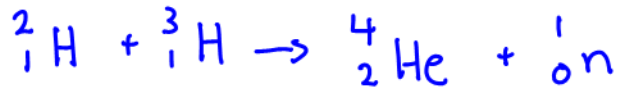


7.3b Nuclear Fusion

Science 10 Notes

Nuclear Fusion

- A second type of nuclear reaction is a nuclear fusion reaction.
- This occurs when two small nuclei join together into one larger nucleus releasing large amounts of energy:



- Nuclear fusion reactions produce more energy for a given mass than nuclear fission. reactions.
 - sun is a huge fusion reactor
 - needs to have a high temperature.
 - fusion is responsible for all atoms being made from hydrogen
- Fusion is considered clean because it does not produce radioactive, products, however it is hard to control and needs extremely high temperatures
- We have not yet discovered a safe way to control the energy of a nuclear fusion reaction.
- In 1989, scientists thought they had discovered cold fusion, but were incorrect.
- cold fusion would occur at room temperatures, and would be controllable

p140-142.

#1-5 on p142