

Nuclear Bomb.

Based on uncontrolled nuclear reactions.

Atom bomb	Hydrogen bomb
Based on fission process it involves the fission of U235	Based on fusion process. Mixture of deutron and tritium is used in it
In this critical size is important	There is no limit to critical size
Explosion is possible at normal temperature and pressure	High temperature and pressure are required
Less energy is released compared to hydrogen bomb	More energy is released as compared to atom bomb so it is more dangerous than atom bomb

Concepts

A test tube full of base nuclei will weight heavier than the earth.

The nucleus of hydrogen contains only one proton. Therefore we may say that the proton is the nucleus of hydrogen atom.

If the relative abundance of isotopes in an element has a ratio $n_1 : n_2$ whose atomic masses are

m_1 and m_2 then atomic mass of the element is
$$M = \frac{n_1 m_1 + n_2 m_2}{n_1 + n_2}$$