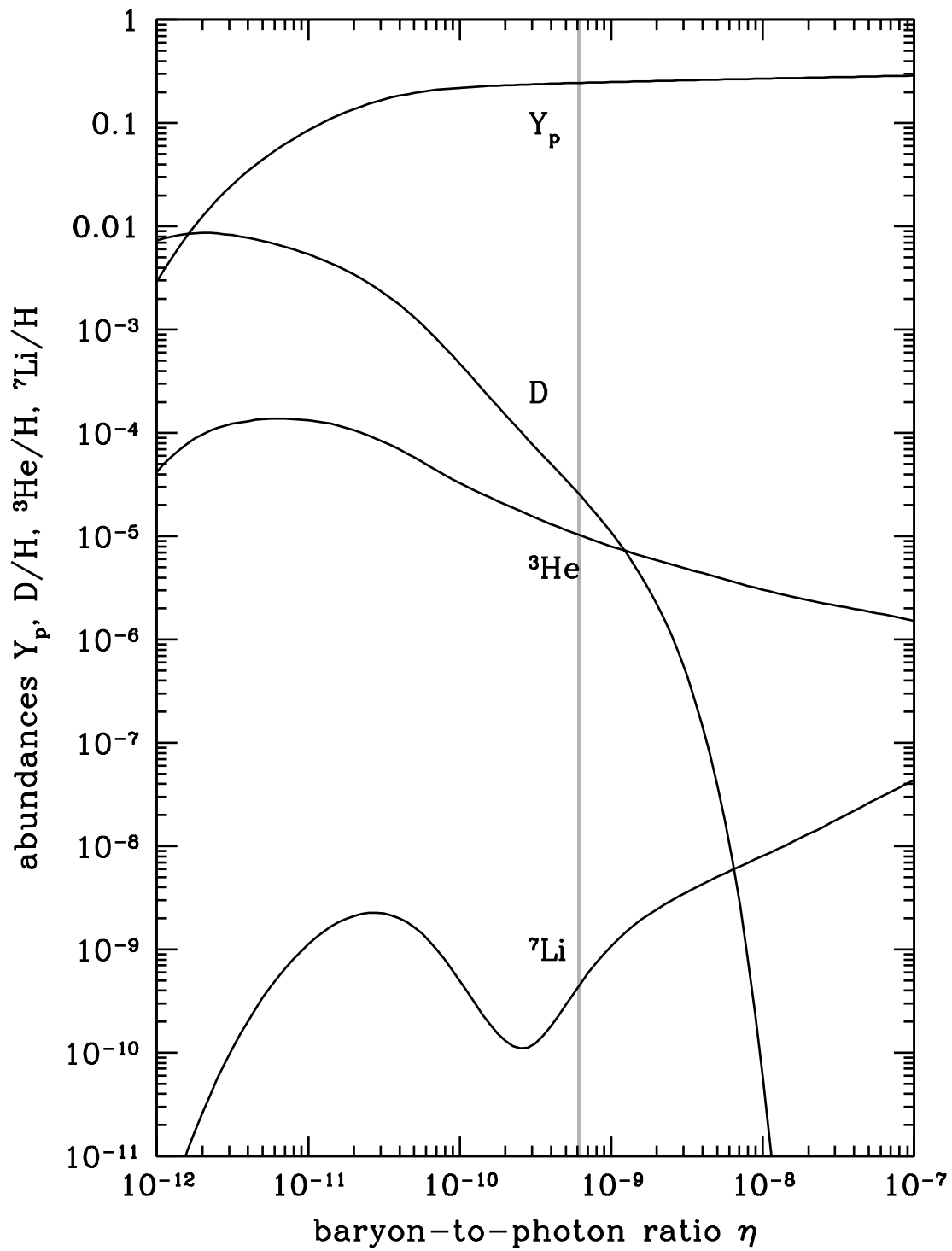
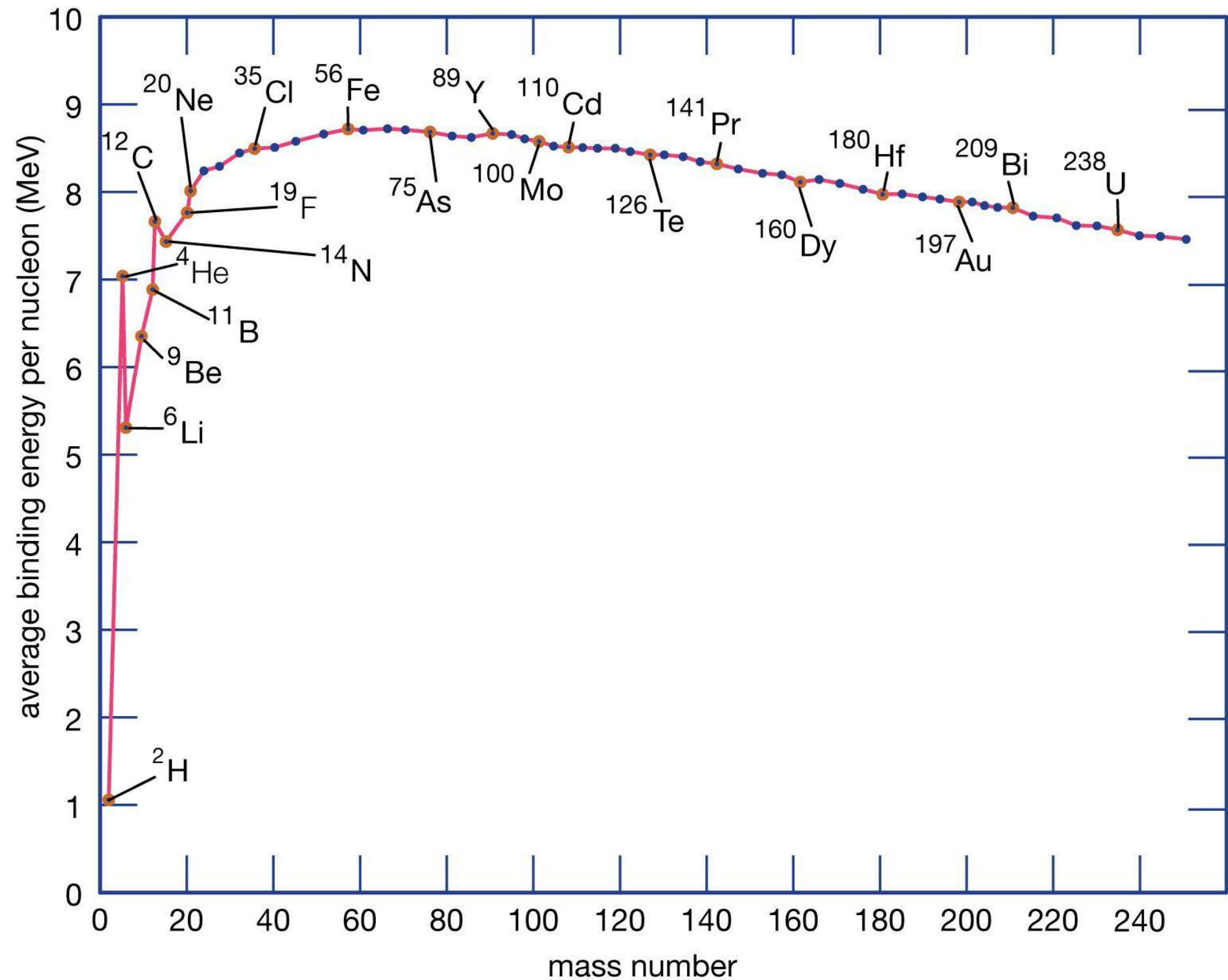
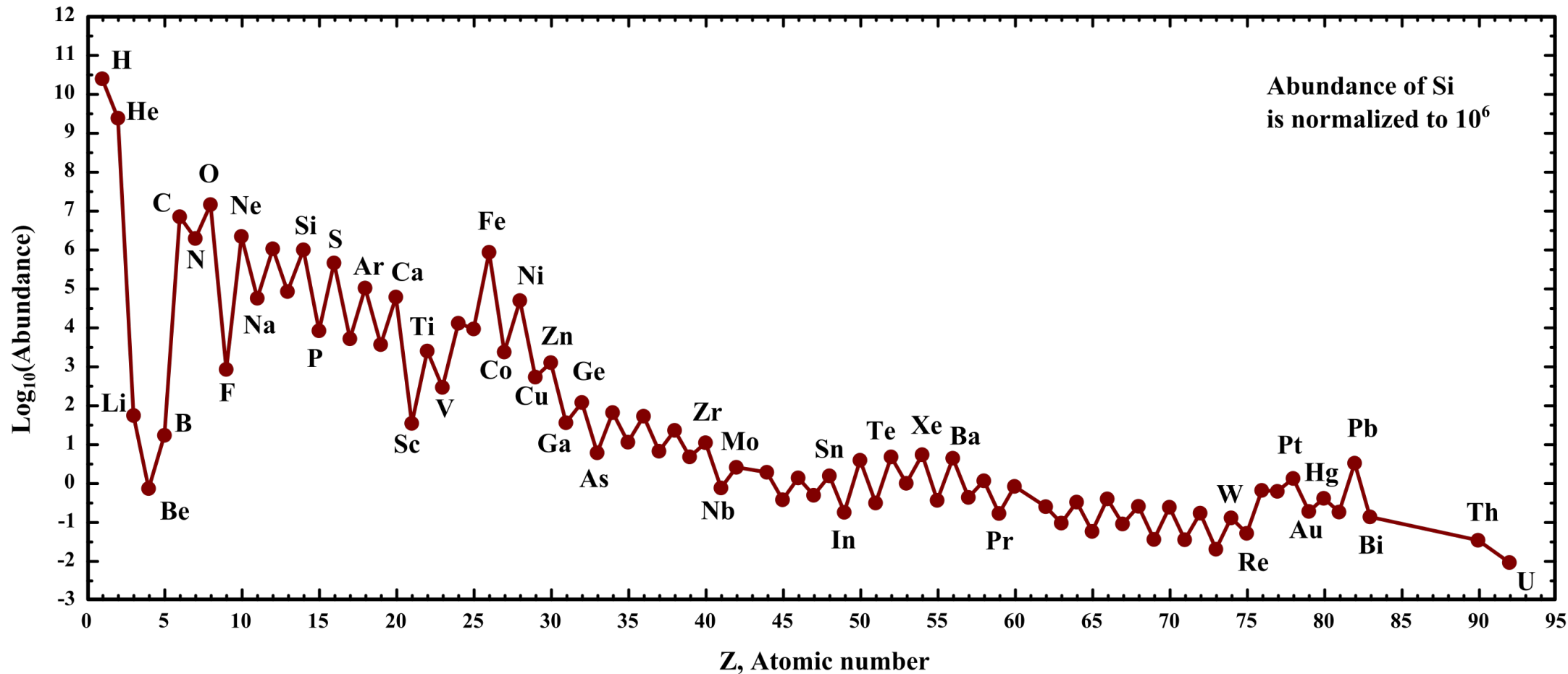
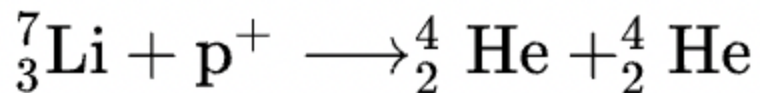
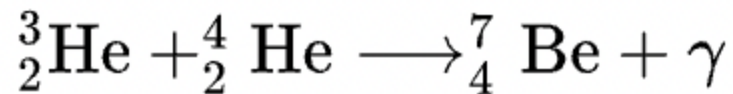
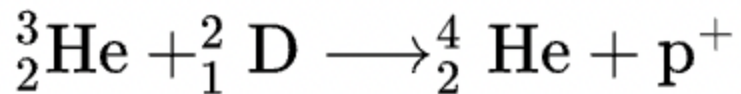
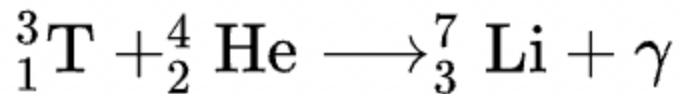
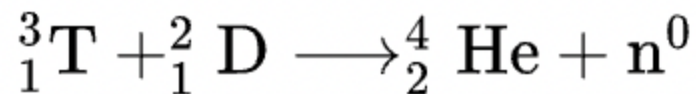
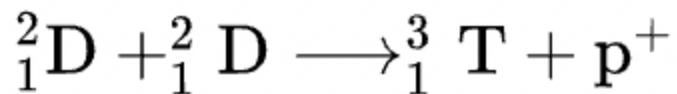
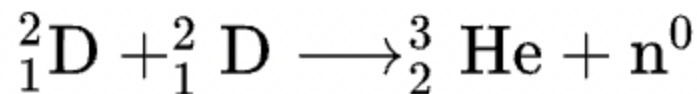
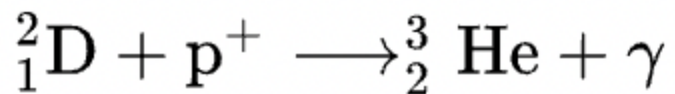
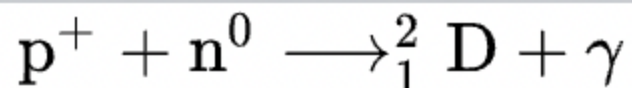
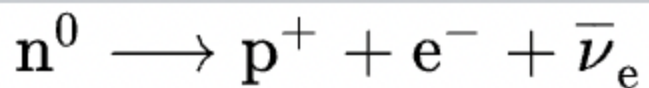






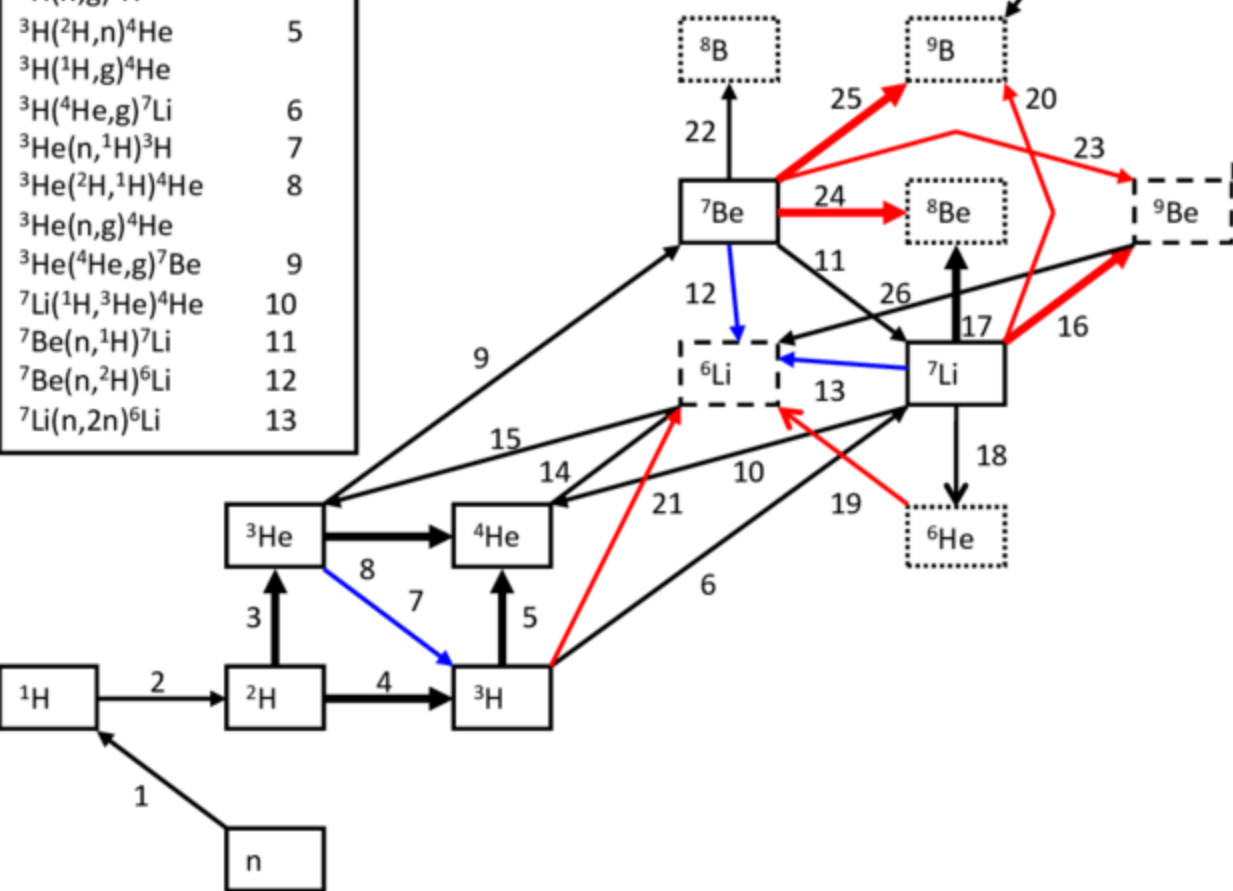




Chief nuclear reactions responsible for the **relative abundances** of light **atomic nuclei** observed throughout the universe.

Reaction Key

$n \rightarrow {}^1\text{H}$	1
${}^1\text{H}(n,g){}^2\text{H}$	2
${}^2\text{H}({}^2\text{H},n){}^3\text{He}$	3
${}^2\text{H}({}^1\text{H},g){}^3\text{He}$	4
${}^2\text{H}({}^2\text{H},{}^1\text{H}){}^3\text{H}$	5
${}^2\text{H}(n,g){}^3\text{H}$	6
${}^3\text{H}({}^2\text{H},n){}^4\text{He}$	7
${}^3\text{H}({}^1\text{H},g){}^4\text{He}$	8
${}^3\text{H}({}^4\text{He},g){}^7\text{Li}$	9
${}^3\text{He}(n,{}^1\text{H}){}^3\text{H}$	10
${}^3\text{He}({}^2\text{H},{}^1\text{H}){}^4\text{He}$	11
${}^3\text{He}(n,g){}^4\text{He}$	12
${}^3\text{He}({}^4\text{He},g){}^7\text{Be}$	13
${}^7\text{Li}({}^1\text{H},{}^3\text{He}){}^4\text{He}$	14
${}^7\text{Be}(n,{}^1\text{H}){}^7\text{Li}$	15
${}^7\text{Be}(n,{}^2\text{H}){}^6\text{Li}$	16
${}^7\text{Li}(n,2n){}^6\text{Li}$	17



Completely
unstable

Some stable
states

Reaction Key

${}^4\text{He}({}^2\text{H},g){}^6\text{Li}$	14
${}^6\text{Li}({}^1\text{H},{}^4\text{He}){}^3\text{He}$	15
${}^7\text{Li}({}^3\text{H},n){}^9\text{Be}$	16
${}^7\text{Li}({}^3\text{He},{}^1\text{H}){}^9\text{Be}$	17
${}^7\text{Li}({}^2\text{H},n){}^8\text{Be}$	17
${}^7\text{Li}({}^1\text{H},g){}^8\text{Be}$	17
${}^7\text{Li}({}^3\text{He},{}^2\text{H}){}^8\text{Be}$	17
${}^8\text{Be} \rightarrow {}^4\text{He} + {}^4\text{He}$	18
${}^7\text{Li}({}^3\text{H},{}^4\text{He}){}^6\text{He}$	18
${}^6\text{He} \rightarrow {}^6\text{Li} \text{ or } {}^4\text{He} + {}^2\text{H}$	19
${}^7\text{Li}({}^3\text{He},n){}^9\text{B}$	20
${}^3\text{He}({}^3\text{H},g){}^6\text{Li}$	21
${}^7\text{Be}({}^1\text{H},g){}^8\text{B}$	22
${}^7\text{Be}({}^3\text{H},{}^1\text{H}){}^9\text{Be}$	23
${}^7\text{Be}({}^2\text{H},{}^1\text{H}){}^8\text{Be}$	24
${}^7\text{Be}({}^3\text{H},{}^2\text{H}){}^8\text{Be}$	24
${}^7\text{Be}({}^3\text{He},{}^1\text{H}){}^9\text{B}$	25
${}^7\text{Be}({}^3\text{H},n){}^9\text{B}$	25
${}^9\text{Be}({}^1\text{H},{}^4\text{He}){}^6\text{Li}$	26

Z, Number of Protons

