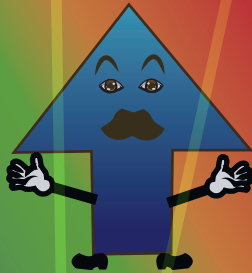


Proton (10 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.3 MeV
Half Life: Stable

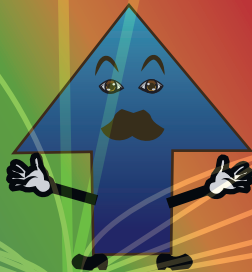
Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.3 MeV
Half Life: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.8 MeV
Half Life: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Neutron (10 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.3 MeV
Half Life: Stable

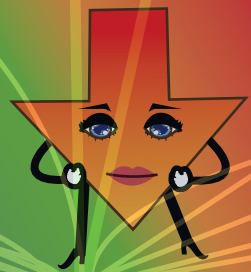
Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.8 MeV
Half Life: Stable

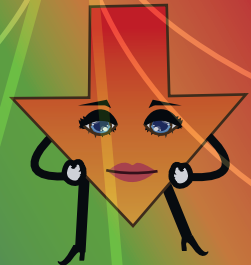
Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.8 MeV
Half Life: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Electric Charge: +1
Spin: $1/2$
Mass: 938.273 MeV
Half Life: $>10^{31}$ years

Protons are subatomic particles that are present in the nucleus of every atom.

The number of protons in the nucleus determines the element or type of atom.

Electric Charge: 0
Spin: $1/2$
Mass: 939.565 MeV
Half Life: 881.5 s

Neutrons are subatomic particles that are present in the nucleus of all atoms except hydrogen-1.

The number of neutrons determines the isotope of the element and its stability.