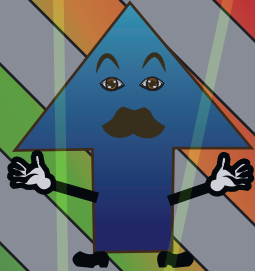


Anti-Proton (30 Points)

Anti-Up Quark

Electric Charge: $-2/3$
Spin: $1/2$
Mass: 2.2 MeV
Mean Lifetime: Stable

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



Anti-Up Quark

Electric Charge: $-2/3$
Spin: $1/2$
Mass: 2.2 MeV
Mean Lifetime: Stable

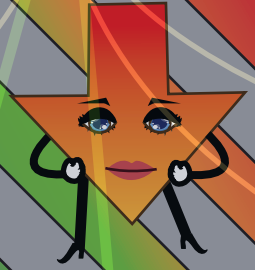
Colour Charge: Yes
Baryon Number: $-1/3$
1st generation (1 point)



Anti-Down Quark

Electric Charge: $+1/3$
Spin: $1/2$
Mass: 4.7 MeV
Mean Lifetime: Stable

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



Electric Charge: -1
Spin: $1/2$
Mass: 938.27 MeV
Mean Lifetime: $>10^{29}$ years

The existence of the anti-proton was predicted by Paul Dirac in his Nobel Prize Lecture in 1932.

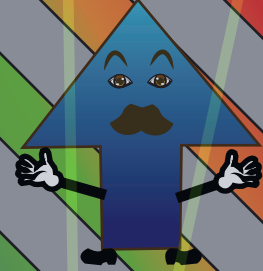
It was experimentally confirmed in 1955 at the Bevatron accelerator in California.

Anti-Neutron (30 Points)

Anti-Up Quark

Electric Charge: $-2/3$
Spin: $1/2$
Mass: 2.2 MeV
Mean Lifetime: Stable

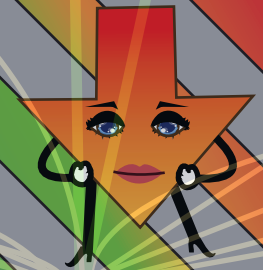
Colour Charge: Yes
Baryon Number: $-1/3$
1st generation (1 point)



Anti-Down Quark

Electric Charge: $+1/3$
Spin: $1/2$
Mass: 4.7 MeV
Mean Lifetime: Stable

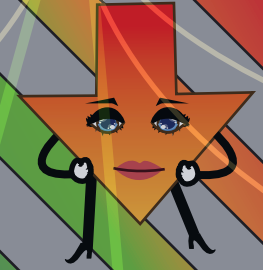
Colour Charge: Yes
Baryon Number: $-1/3$
1st generation (1 point)



Anti-Down Quark

Electric Charge: $+1/3$
Spin: $1/2$
Mass: 4.7 MeV
Mean Lifetime: Stable

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



Electric Charge: 0
Spin: $1/2$
Mass: 939.565 MeV
Mean Lifetime: 878 s

Anti-neutrons were discovered in 1956 by Bruce Cork at the Bevatron.

The anti-neutron has the same properties as the neutron but it is not the same particle.

Particle Builder

Target Card

Particle Builder

Target Card