Standard Model of Elementary Particles

three generations of matter
(fermions)

	I	II	III		
mass	≈2.4 MeV/c²	≈1.275 GeV/c²	≈172.44 GeV/c²	0	≈125.09 GeV/c²
charge	2/3	2/3	2/3	0	0
spin	1/2	1/2	1/2	1	0
	u	c	t	g	H
	up	charm	top	gluon	Higgs
	≈4.8 MeV/c²	≈95 MeV/c²	≈4.18 GeV/c²	0	
	-1/3	-1/3	-1/3	0	
	1/2	1/2	1/2	1	
	d	s	b	γ	
	down	strange	bottom	photon	
	≈0.511 MeV/c²	≈105.67 MeV/c²	≈1.7768 GeV/c²	≈91.19 GeV/c²	
	-1	-1	-1	0	
	1/2	1/2	1/2	1	
	e	μ	τ	Z	
	electron	muon	tau	Z boson	
	<2.2 eV/c²	<1.7 MeV/c²	<15.5 MeV/c²	≈80.39 GeV/c²	
	0	0	0	±1	
	1/2	1/2	1/2	1	
	ν_e	ν_μ	ν_τ	W	
	electron neutrino	muon neutrino	tau neutrino	W boson	

QUARKS

LEPTONS

GAUGE BOSONS

SCALAR BOSONS