three generations of matter
(fermions)

	I	II	III		
mass	≃2.2 MeV/c^2	≃1.28 GeV/c^2	≃173.1 GeV/c^2	0	≈125.09 GeV/c^2
charge	2/3	2/3	2/3	0	0
spin	1/2	1/2	1/2	1	0
QUARKS	u up	c charm	t top	g gluon	H Higgs
	≃4.7 MeV/c^2	≃96 MeV/c^2	≈4.18 GeV/c^2	0	
	-1/3	-1/3	-1/3	0	
	1/2	1/2	1/2	1	
	d down	s strange	b bottom	γ photon	
LEPTONS	≈0.511 MeV/c^2	≃105.66 MeV/c^2	≈1.7768 GeV/c^2	≈91.19 GeV/c^2	GAUGE BOSONS
	-1	-1	-1	0	
	1/2	1/2	1/2	1	
	e electron	μ muon	τ tau	Z Z boson	
	<2.2 eV/c^2	<1.7 MeV/c^2	<15.5 MeV/c^2	≈80.39 GeV/c^2	
	0	0	0	±1	
	1/2	1/2	1/2	1	
	ν_e electron neutrino	ν_μ muon neutrino	ν_τ tau neutrino	W W boson	

SCALAR BOSONS