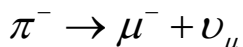


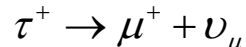
Elementary Particle - Conservation Law Worksheet

One or more conservation laws are broken with each of these reactions – explain which. (Answers on separate page – don't peek ahead!!) *If prompted to fix ...* what **ONE particle could you add (or subtract) (to/from either side)** or what **ONE particle would you change (on either side)** to fix it (might be several possible fixes – just indicate one, and fill it in on the chart). (Use tables to fill in charts – look for each row to balance ... $\text{sum}_{\text{left}} = \text{sum}_{\text{right}}$)



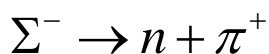
Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



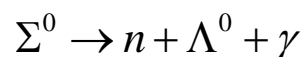
Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



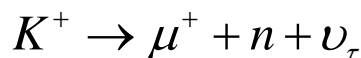
Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



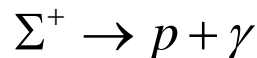
Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????



Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Don't bother fixing this one!!!!



Q				⇒			
B				⇒			
S				⇒			
Le				⇒			
Lμ				⇒			
Lτ				⇒			

Can fix????