|  |  |  |  |
| --- | --- | --- | --- |
| **alpha** | **beta** | **gamma** | **positron** |
| α | β | γ |  |
| Mass number of 4 | Mass number of 0 | Mass number of 0 | Mass number of 0 |
| Equivalent to a helium nucleus | Equivalent to an electron (but moving at high speed!) | Pure energy | Antimatter equivalent of an electron |
| Charge of +2 | Charge of -1 | No charge | Charge of +1 |
| Stopped rather easily, by paper | Stopped by aluminum | Stopped by lead | Stopped by aluminum |
| When produced by an atom, the atomic number goes down by 2 and the mass number goes down by 4 | When produced by an atom, the atomic number goes up by 1 and the mass number stays the same | When produced by an atom, the atomic number goes down by 1 and the mass number stays the same |  |