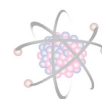
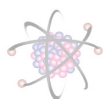


Nuclear Chemistry Worksheet

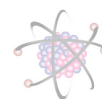


Complete the following nuclear equations:

1. $\underline{\hspace{1cm}} \rightarrow {}_{-1}^0e + {}_7^{14}\text{N}$
2. $\underline{\hspace{1cm}} + {}_2^4\text{He} \rightarrow {}_6^{12}\text{C} + {}_0^1n$
3. ${}_{93}^{239}\text{Np} \rightarrow {}_{94}^{239}\text{Pu} + \underline{\hspace{1cm}}$
4. $\underline{\hspace{1cm}} + {}_{92}^{238}\text{U} \rightarrow {}_{94}^{240}\text{Pu} + {}_0^1n + {}_0^1n$
5. ${}_0^1n + \underline{\hspace{1cm}} \rightarrow {}_{92}^{236}\text{U}$
6. ${}_{7}^{13}\text{N} \rightarrow \underline{\hspace{1cm}} + {}_{+1}^0e$
7. $\underline{\hspace{1cm}} + {}_1^1\text{H} \rightarrow {}_6^{12}\text{C} + {}_2^4\text{He}$
8. $\underline{\hspace{1cm}} + {}_0^1n \rightarrow {}_1^3\text{H} + {}_2^4\text{He}$
9. ${}_{88}^{226}\text{Ra} \rightarrow {}_2^4\text{He} + \underline{\hspace{1cm}}$
10. ${}_{9}^{18}\text{F} \rightarrow {}_{10}^{18}\text{Ne} + \underline{\hspace{1cm}}$
11. ${}_{24}^{49}\text{Cr} \rightarrow \underline{\hspace{1cm}} + {}_{+1}^0e$
12. ${}_{94}^{239}\text{Pu} + \underline{\hspace{1cm}} \rightarrow {}_{95}^{241}\text{Am} + {}_1^1p + {}_0^1n$
13. ${}_3^7\text{Li} + {}_3^7\text{Li} \rightarrow {}_2^4\text{He} + \underline{\hspace{1cm}}$
14. ${}_6^{14}\text{C} \rightarrow {}_7^{14}\text{N} + \underline{\hspace{1cm}}$
15. ${}_1^3\text{H} + {}_1^2\text{H} \rightarrow \underline{\hspace{1cm}} + {}_0^1n$
16. ${}_4^9\text{Be} + {}_2^4\text{He} \rightarrow \underline{\hspace{1cm}} + {}_0^1n$
17. ${}_{7}^{14}\text{N} + {}_2^4\text{He} \rightarrow \underline{\hspace{1cm}} + {}_{+1}^0e$
18. ${}_{12}^{26}\text{Mg} + {}_0^1n \rightarrow \underline{\hspace{1cm}} + {}_{+1}^0e$
19. ${}_{27}^{59}\text{Co} + {}_1^2\text{H} \rightarrow \underline{\hspace{1cm}} + {}_{+1}^0e$
20. ${}_{84}^{208}\text{Po} \rightarrow \underline{\hspace{1cm}} + {}_2^4\text{He}$



Nuclear Chemistry Worksheet



Complete the following nuclear equations:

- ${}^1_6\text{C} \rightarrow {}^0_{-1}e + {}^1_7\text{N}$
- ${}^9_4\text{Be} + {}^4_2\text{He} \rightarrow {}^{12}_6\text{C} + {}^1_0n$
- ${}^{239}_{93}\text{Np} \rightarrow {}^{239}_{94}\text{Pu} + \underline{{}^0_{-1}e}$
- ${}^4_2\text{He} + {}^{238}_{92}\text{U} \rightarrow {}^{240}_{94}\text{Pu} + {}^1_0n + {}^1_0n$
- ${}^1_0n + \underline{{}^{235}_{92}\text{U}} \rightarrow \underline{{}^{236}_{92}\text{U}}$
- ${}^{13}_7\text{N} \rightarrow \underline{{}^{13}_6\text{C}} + {}^0_{+1}e$
- ${}^{15}_7\text{N} + {}^1_1\text{H} \rightarrow {}^{12}_6\text{C} + {}^4_2\text{He}$
- ${}^6_3\text{Li} + {}^1_0n \rightarrow {}^3_1\text{H} + {}^4_2\text{He}$
- ${}^{226}_{88}\text{Ra} \rightarrow {}^4_2\text{He} + \underline{{}^{222}_{86}\text{Rn}}$
- ${}^{18}_9\text{F} \rightarrow {}^{18}_{10}\text{Ne} + \underline{{}^0_{-1}e}$
- ${}^{49}_{24}\text{Cr} \rightarrow \underline{{}^{49}_{23}\text{V}} + {}^0_{+1}e$
- ${}^{239}_{94}\text{Pu} + \underline{{}^4_2\text{He}} \rightarrow \underline{{}^{241}_{95}\text{Am}} + {}^1_1p + {}^1_0n$
- ${}^7_3\text{Li} + {}^7_3\text{Li} \rightarrow {}^4_2\text{He} + \underline{{}^{10}_4\text{Be}}$
- ${}^{14}_6\text{C} \rightarrow {}^{14}_7\text{N} + \underline{{}^0_{-1}e}$
- ${}^3_1\text{H} + {}^2_1\text{H} \rightarrow \underline{{}^4_2\text{He}} + {}^1_0n$
- ${}^9_4\text{Be} + {}^4_2\text{He} \rightarrow \underline{{}^{12}_6\text{C}} + {}^1_0n$
- ${}^{14}_7\text{N} + {}^4_2\text{He} \rightarrow \underline{{}^{18}_8\text{O}} + {}^0_{+1}e$
- ${}^{26}_{12}\text{Mg} + {}^1_0n \rightarrow \underline{{}^{27}_{11}\text{Na}} + {}^0_{+1}e$
- ${}^{59}_{27}\text{Co} + {}^2_1\text{H} \rightarrow \underline{{}^{61}_{27}\text{Co}} + {}^0_{+1}e$
- ${}^{208}_{84}\text{Po} \rightarrow \underline{{}^{204}_{82}\text{Pb}} + {}^4_2\text{He}$