**HONORS HOMEWORK 6.1A**

**Use this template for nuclear symbols and equations:** $$ 🡪 $$ + $$

1. **Nuclear equations vs Chemical Equations**

Briefly summarise the main differences between nuclear equations and chemical equations in the table below:

|  |  |
| --- | --- |
| Nuclear equations | Chemical Equations  |
|  |  |

1. **Writing nuclear equations**

|  |  |  |
| --- | --- | --- |
| (a) | Write a nuclear equation to show the emission of an alpha particle by radium-224 |   |
| (b) | Write a nuclear equation to show the emission of an alpha particle by americium-241 |   |
| (c) | Write a nuclear equation to show the emission of a beta particle by actinium-228 |   |
| (d) | Write a nuclear equation to show the emission of a beta particle by oxygen-18 |   |
| (e) | Polonium-216 is formed when another atom releases an alpha particle. Write a nuclear equation for this reaction. |   |
| (f) | Nitrogen-14 is formed when another atom releases a beta particle. Write a nuclear equation for this reaction. |   |