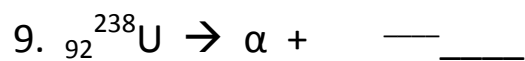
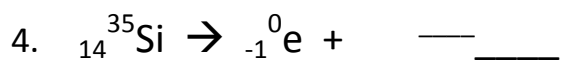


# Nuclear Reactions & Half-Life Practice

Name: \_\_\_\_\_

**Balancing Nuclear Equations:** Balance each nuclear reaction by filling in the missing particle in each case.



**Writing Nuclear Equations:** Write the full nuclear equation of each type of radioactive decay described.

1. Write a nuclear equation for the alpha decay of  ${}_{91}^{231}\text{Pa}$ .

2. Write a nuclear equation for the beta decay of  ${}_{87}^{223}\text{Fr}$ .

3. Write a nuclear equation for the alpha decay of  ${}_{101}^{249}\text{Md}$ .

4. Write a nuclear equation for the beta decay of  ${}_{85}^{198}\text{At}$ .

5. Write a nuclear equation for the alpha decay of  ${}_{62}^{148}\text{Sm}$ .

