

Name : _____ Date : _____

Balancing Nuclear Equations Worksheet

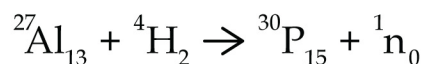
1. Consider the following two nuclear reactions and answer the given questions.



a) Write the names of the products of francium-220 decay.

b) Write the names of the products of nitrogen-16 decay.

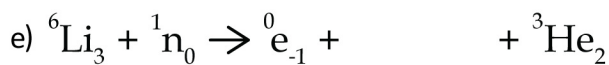
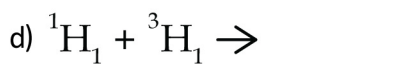
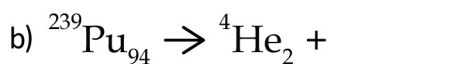
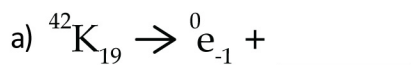
2. Given the following nuclear reaction:



a) What particle is bombarded with aluminum-27? _____

b) What particle is released from the reaction? _____

3. Fill in the blanks to complete the following nuclear reactions.



4. Write a balanced nuclear equation for each decay process indicated.

a) The isotope Th-234 decays by an alpha emission.

b) The isotope Fe-59 decays by beta emission.

c) The isotope Tc-99 decays by gamma emission.

Balancing Nuclear Equations Worksheet

1. Answers



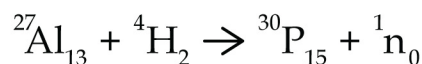
a) Write the names of the products of francium-220 decay.

Alpha particle and astatine-216

b) Write the names of the products of nitrogen-16 decay.

Beta particle and oxygen-16

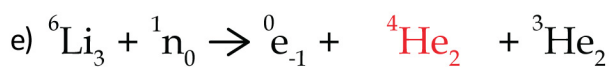
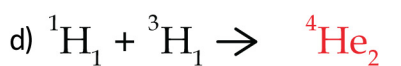
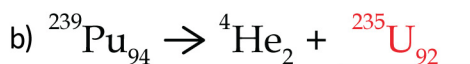
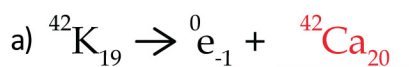
2.



a) What particle is bombarded with aluminum-27? Alpha particle

b) What particle is released from the reaction? neutron

3.



4.

a) The isotope Th-234 decays by an alpha emission.



b) The isotope Fe-59 decays by beta emission.



c) The isotope Tc-99 decays by gamma emission.

