

True and False

If the statement is true, write **True** in the blank, if the statement is false write the word or words that make the statement true.

- _____ 22. A change that produces a new substance is a chemical change.
- _____ 23. Synthesis is the process of making a more complex compound from simpler substances.
- _____ 24. Chemical reactions that absorb energy are said to be exothermic.
- _____ 25. The materials present at the beginning of a chemical reaction are called the products.
- _____ 26. The amount of matter in a chemical reaction changes.
- _____ 27. In a chemical reaction, chemical bonds are formed or broken.
- _____ 28. In a chemical reaction, the total mass of the reactants is greater than the total mass of the products.



N

H



Fe

O

31. **A log burns in a fireplace, giving off gases and leaving behind ash.**

Is the reaction endothermic or exothermic.

Did the products gain energy or lose energy.

Was energy absorbed or given off.

32. **When vinegar and baking soda are mixed, new substances form and the solution becomes cooler.**

Is the reaction endothermic or exothermic.

Did the products gain energy or lose energy.

Was energy absorbed or given off.

Identify one or more choices that best complete the statement or answer the question.

- _____ 33. Which of the following would be an example of an inhibitor? **(pick all that apply)**
- a. additives in gasoline slow the burning
 - b. proteins called enzymes in your body speed up the bodies functions.
 - c. adding salt to a vinegar solution to speed up the cleaning corrosion off of pennies.
 - d. food perservatives that slow spoiling
- _____ 34. The only sure evidence of a chemical reaction is **(pick all that apply)**
- a. the production of a new substance
 - b. changes in energy
 - c. a color change
 - d. the formation of a gas