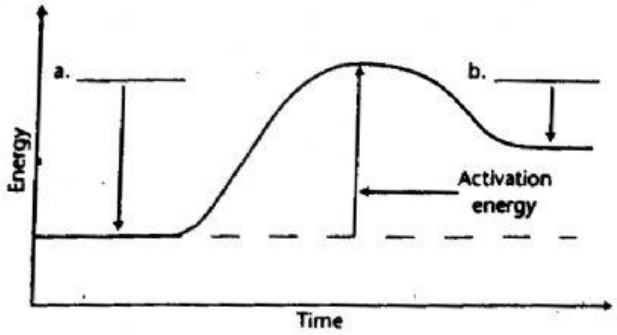
Use the diagram below to answer questions 21 through 23.



product

reactant

21. Drag and drop the labels for reactants and products into the correct place

22. Drawing Conclusions Is this reaction endothermic or exothermic? Explain your answer.

The reaction is (endothermic exothermic) because the products have (more less) energy than the reactants. This means energy was (stored released) as (chemical potential energy heat and light) during the reaction.

25. Use the principle of conservation of mass to explain how you know the following equation is balanced. The symbol Fe represents iron and O represents oxygen.
How many atoms of iron and oxygen are present as products and how many are present as reactants?

$$4Fe + 3O_2 \rightarrow 2Fe_2O_3$$

Fe

O