**Rocket Pre-Lab!**

1. Given a chemical reaction between zinc metal and hydrochloric acid:
   1. What type of reaction is this?
   2. What are the products?
   3. Write a balanced chemical equation for this reaction.
2. Write a balanced chemical equation for the decomposition of hydrogen peroxide (H2O2) in the presence of a manganese (IV) oxide catalyst.
3. What is the purpose of a catalyst?