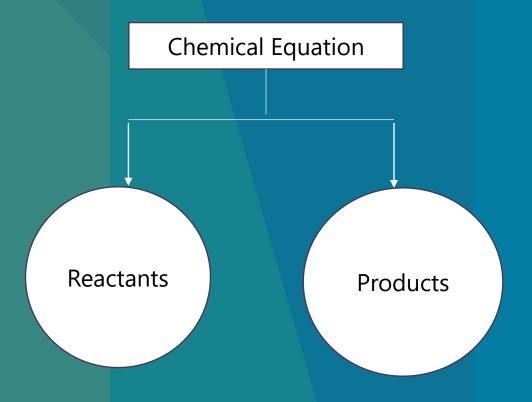
Topics to be covered.uk Notes a Notes

- ***** Types of Chemical Reactions
- Corrosion
- ***** Rancidity
- Practice Problems



Definition Of Chemical co.uk Reaction

A chemical reaction is a process that leads to the chemical transformation of one set of chemical substances to another.



This is the equation balanced for iron:

4 Fe +
$$O_2 \rightarrow 2 \text{ Fe}_2 O_3$$

When balancing chemical equations, the last step is to addly coefficients to oxygen and hydrogen atoms. The reason is that they usually appear in multiple reactants and products, so if you tackle them first you're usually making extra work for yourself.

Now, look at the vitation (use in fection) to see which coefficient will work to balance oxygen. It you put a 2 in from of O_2 , that will give you 4 atoms of oxygen, but you have 6 atoms of oxygen in the product (coefficient of 2 multiplied by the subscript of 3). So, 2 does not work.

If you try 3 O₂, then you have 6 oxygen atoms on the reactant side and also 6 oxygen atoms on the product side. This works! The balanced chemical equation is:

$$4 \text{ Fe} + 3 \text{ O}_2 \rightarrow 2 \text{ Fe}_2 \text{O}_3$$

