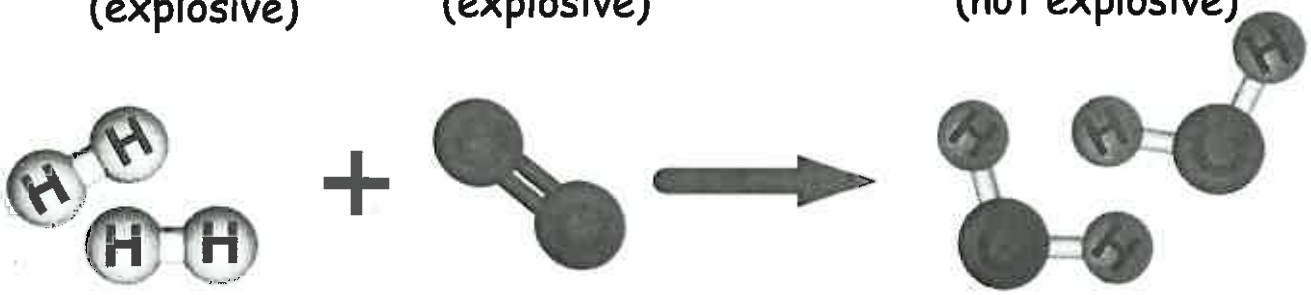
Target 2: I can explain what happens to atoms when a chemical reactions occurs.

- During a chemical reaction, the atoms that make up the original substances are rearranged to form new substances. These new substances have different properties from the original substances.

$$2H_2 + O_2 \rightarrow 2H_2O$$

Hydrogen Gas (explosive) + Oxygen Gas (explosive) → Water (not explosive)



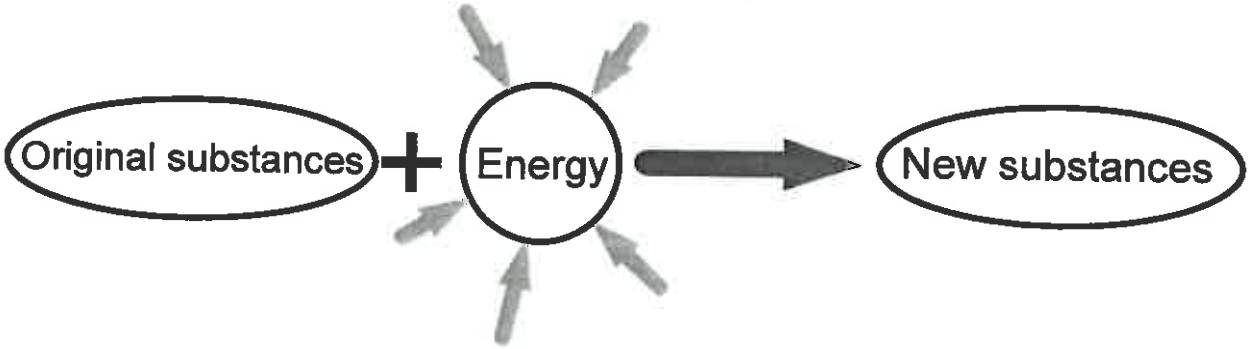
Reminder:

4 Types of evidence of a chemical change

1. Energy is released (light, heat)
2. gas bubbles are formed
3. A new solid substance is formed (precipitate)
4. Color change (with new substance)

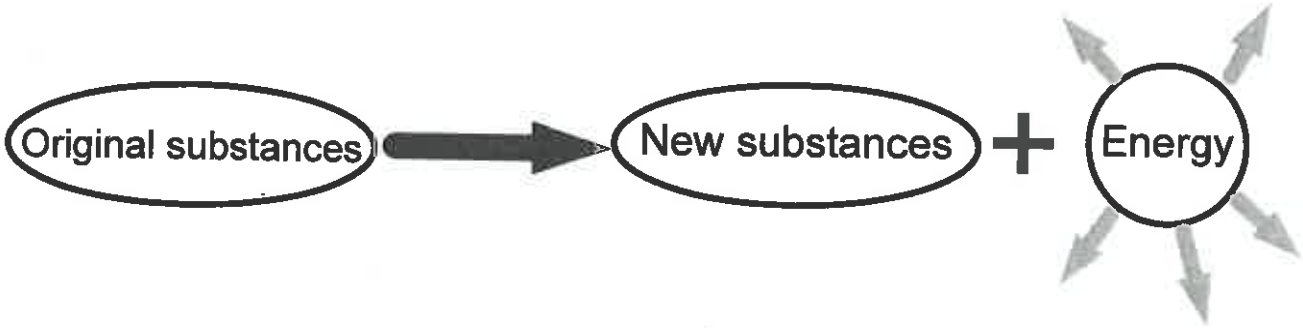
Target 4: I can determine whether a chemical reaction is exothermic or endothermic.

Endothermic reaction: a chemical reaction that absorbs energy



examples include: Photosynthesis, coldpacks, alka-selzer dissolving in water.

Exothermic reaction: a chemical reaction that releases energy



Examples include: Burning anything, fireworks, food digestion