

Chapter 6 Chemical Reactions

Sec. 1 Evidence for a Chemical Reaction

What tells us a chemical reaction has occurred?

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Sec. 2 Chemical Equations

Chemical equations represents chemical reactions.

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Remember in a chemical reaction:

Atoms are rearranged.

Chemical equations must reflect the _____.
That's why we must balance equations.

Symbols used in chemical equations:

(s) =

↑ =

(l) =

↓ =

(g) =

(aq) =

↔ =

→ =

→ =

+ = used to separate multiple reactants/products

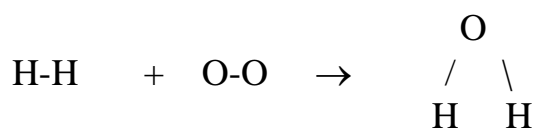
Sec. 3 Balancing Chemical Equations

When balancing equations:

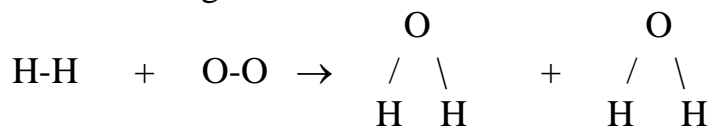
(Do not change subscripts when balancing.)

May have to use trial and error when balancing.

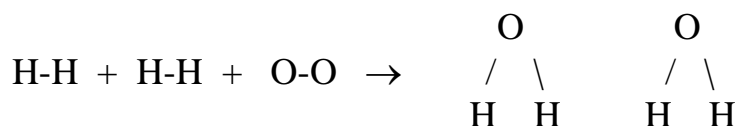
Hydrogen and oxygen gas react to produce water.
(First write skeletal equation)



Not reflecting the law of conservation of mass. What can we do?



Still not correct.



Rewrite in equation form.

Use chemical equations instead of pictures.

Rules on pg. 154 for writing and balancing equations.

Make sure coefficients are reduced as far as possible.

Self check 6.2 pg. 156

Self check 6.3 c. pg. 157