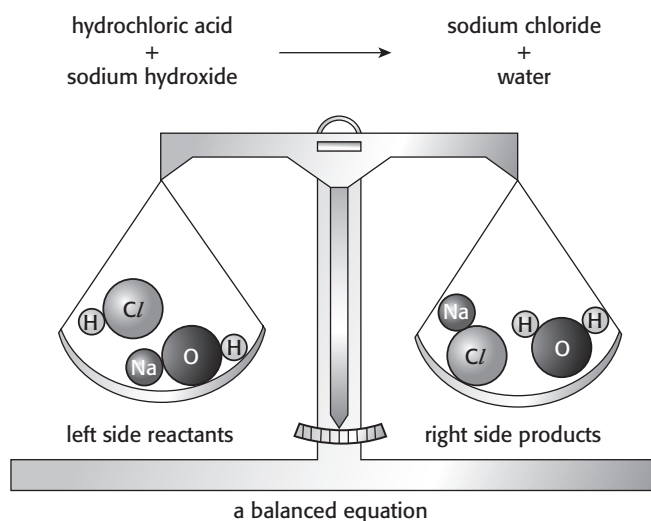


Worksheet 4.2

Balancing chemical equations

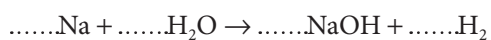
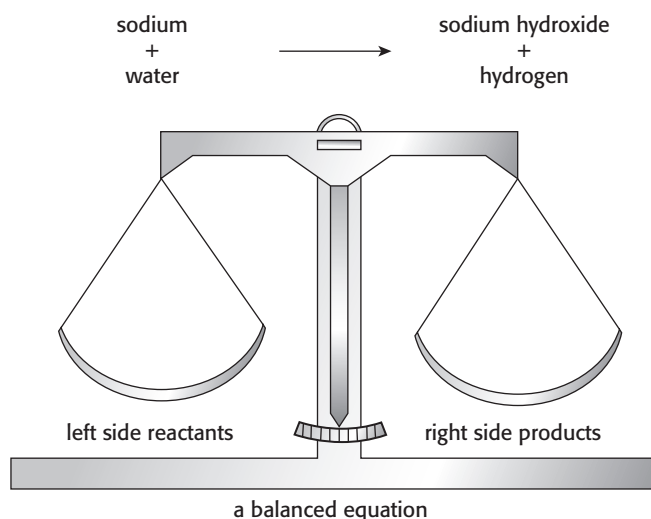
1 a Look at the diagram below.



Write this out as a balanced chemical equation.

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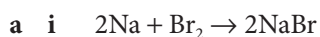
b i Complete the following diagram in a similar way to the one above for the reaction when sodium reacts with water. Draw in the necessary atoms on the balance pans and balance the chemical equation.



ii Write this reaction as a word equation.

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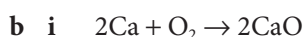
2 For each pair of reactions below, write out the first equation as a word equation; then write a balanced equation for the second reaction.



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ii sodium reacts with chlorine (Cl_2) to produce sodium chloride

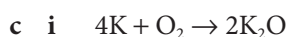
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ii magnesium (Mg) burns in oxygen to give magnesium oxide

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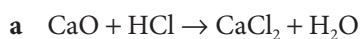
ii sodium (Na) burns in oxygen to give sodium oxide

.....

3 The following equations are unbalanced.

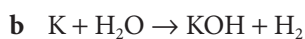
i Balance each chemical equation, and then

ii write out the word equation for each reaction.



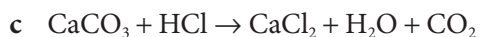
i

ii



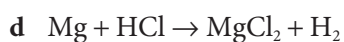
i

ii



i

ii



i

ii