

BCH SCIENCE**Balancing Equations****Problem Set # 1**

(Count the total number of each kind of "reactant atom" and total number of each type of "product atom" to balance the following equations. Record the numbers in the spaces provided.



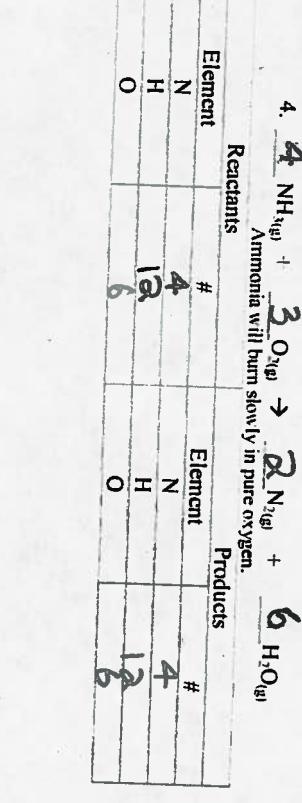
| Element | # | Element | # |
|---------|---|---------|---|
| H | 4 | H | 4 |
| O | 2 | O | 2 |
| | | | |



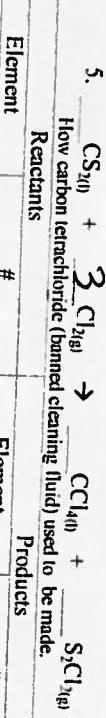
| Element | # | Element | # |
|---------|---|---------|---|
| C | 1 | C | 1 |
| H | 4 | H | 4 |
| O | 4 | O | 4 |
| | | | |



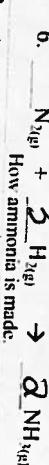
| Element | # | Element | # |
|---------|---|---------|---|
| H | 4 | H | 4 |
| O | 4 | O | 4 |
| | | | |



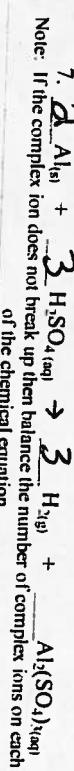
| Element | # | Element | # |
|---------|----|---------|----|
| N | 4 | N | 4 |
| H | 12 | H | 12 |
| O | 6 | O | 6 |
| | | | |



| Element | # | Element | # |
|---------|---|---------|---|
| C | 1 | C | 1 |
| S | 2 | S | 1 |
| Cl | 6 | Cl | 6 |
| | | | |

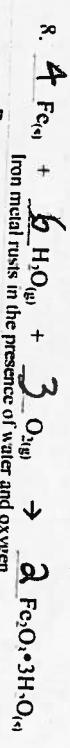


| Element | # | Element | # |
|---------|---|---------|---|
| N | 2 | N | 2 |
| H | 6 | H | 6 |
| | | | |

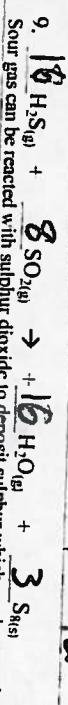


| Element | # | Element | # |
|-----------------|---|-----------------|---|
| Al | 2 | Al | 2 |
| H | 6 | H | 6 |
| SO ₄ | 3 | SO ₄ | 3 |
| | | | |

EXTRA TOUGH!!! Don't need to know how to do these in grade 10.



| Element | # | Element | # |
|---------|----|---------|----|
| Fe | 4 | Fe | 4 |
| H | 12 | H | 12 |
| O | 12 | O | 12 |
| | | | |



| Element | # | Element | # |
|---------|----|---------|----|
| H | 32 | H | 32 |
| S | 32 | S | 32 |
| O | 16 | O | 16 |
| | | | |

Name: _____

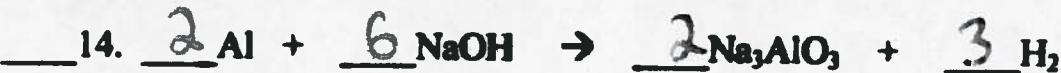
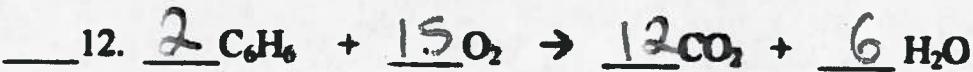
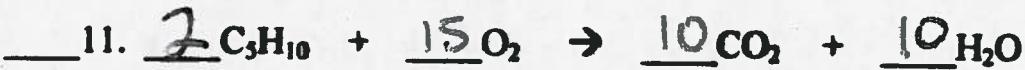
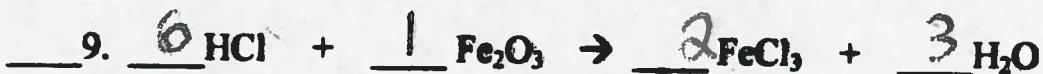
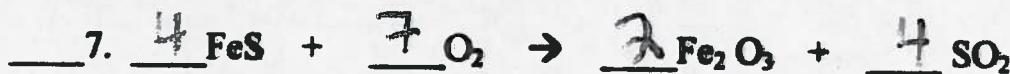
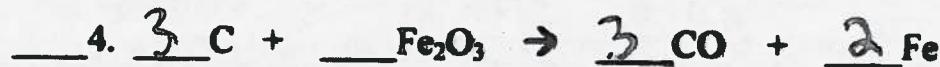
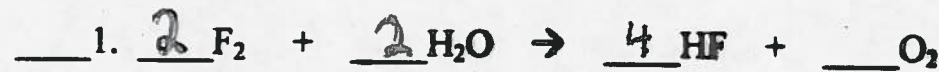
Date: _____

BCI SCIENCE

SNC 2D

Balancing Equations

Problem Set #2



Name: _____

Date: _____

BCI SCIENCE

SNC 2D

Balancing Equations

Problem Set # 3

1. 1 Cu_(s) + 1 O_{2(g)} → 1 CuO_(s)
2. 2 H_{2O(l)} → 2 H_{2(g)} + 1 O_{2(g)}
3. 3 Fe_(s) + 4 H_{2O(l)} → 4 H_{2(g)} + 1 Fe₃O_{4(aq)}
4. 2 AsCl_{3(s)} + 3 H_{2S(aq)} → 1 As₂S_{3(aq)} + 6 HCl_(aq)
5. 1 CuSO_{4·5H_{2O(l)} → 1 CuSO_{4(s)} + 5 H_{2O(g)}}
6. 1 Fe₂O_{3(s)} + 3 H_{2(g)} → 2 Fe_(s) + 3 H_{2O(l)}
7. 1 CaCO_{3(s)} → 1 CaO_(s) + 1 CO_{2(g)}
8. 8 Fe_(s) + 8 S_{2(aq)} → 8 FeS_(s)
9. 2 H_{2S(aq)} + 2 KOH_(aq) → 2 H_{2O(l)} + 1 K₂S_(s)
10. 2 NaCl_(l) → 2 Na_(l) + 1 Cl_{2(g)}
11. 2 Al_(s) + 3 H_{2SO_{4(aq)} → 3 H_{2(g)} + 1 Al₂(SO₄)_{3(aq)}}
12. 1 H_{3PO_{4(aq)} + 3 NH_{4OH(aq)} → 3 H_{2O(l)} + 1 (NH₄)₃PO_{4(l)}}
13. 1 C₃H_{8(l)} + 5 O_{2(g)} → 4 H_{2O(l)} + 3 CO_{2(g)}
14. 4 Al_(s) + 3 O_{2(g)} → 2 Al₂O_{3(s)}
15. 1 CH_{4(l)} + 2 O_{2(g)} → 2 H_{2O(l)} + 1 CO_{2(g)}