

SAFETY BAY SENIOR HIGH SCHOOL
CHEMICAL CHANGE
 Class Test 2

NAME : _____

Mark

/15

Answer all questions in the spaces provided.

1) Balance the following equations:

- | | | | | | | | |
|-------|-----------------------------------|---|---------------------|-------|---------------------------------|---|------------------------------------|
| i) | Mg | + | HCl | ----- | MgCl ₂ | + | H ₂ |
| ii) | SO ₂ | + | O ₂ | ---- | SO ₃ | | |
| iii) | Al ₂ O ₃ | + | HCl | ---- | AlCl ₃ | + | H ₂ O |
| iv) | SO ₃ | + | NaOH | ---- | Na ₂ SO ₄ | + | H ₂ O |
| v) | Fe | + | O ₂ | ---- | Fe ₂ O ₃ | | |
| vi) | NO ₂ | + | H ₂ O | ---- | HNO ₃ | + | HNO ₂ |
| vii) | ZnS | + | O ₂ | ---- | ZnO | + | SO ₂ |
| viii) | Pb(NO ₃) ₂ | | | ---- | PbO | + | NO ₂ + O ₂ |
| ix) | Na | + | CO ₂ | ---- | Na ₂ CO ₃ | + | C |
| x) | NH ₄ Cl | + | Ca(OH) ₂ | ---- | CaCl ₂ | + | NH ₃ + H ₂ O |

(10)

2) Write balanced chemical equations for:

- i) potassium oxide + acetic acid ----- potassium acetate + water

- ii) calcium hydroxide + carbon dioxide ----- calcium carbonate + water

- iii) iron III oxide + carbon ----- iron + carbon monoxide

- iv) zinc carbonate + hydrochloric acid ----- zinc chloride + water + carbon dioxide

- v) sodium oxide + nitric acid ----- sodium nitrate + water

(5)