

SCIENCE (Chemistry)

Acids and Bases - Exercise 4 (Acids, Bases)

Name: _____ () Class: _____ Date: _____

1) Complete the word equations below by filling in the blanks with the names of the products:

a) zinc + dilute sulphuric acid $\rightarrow$ _____ + _____

b) potassium + dilute hydrochloric acid $\rightarrow$ _____ + _____

c) sodium + dilute nitric acid $\rightarrow$ _____ + _____

d) calcium carbonate + dilute hydrochloric acid $\rightarrow$ _____ + _____ + _____

e) copper(II) carbonate + dilute nitric acid $\rightarrow$ _____ + _____ + _____

f) sodium carbonate + dilute sulphuric acid $\rightarrow$ _____ + _____ + _____

g) copper(II) oxide + dilute nitric acid $\rightarrow$ _____ + _____

h) calcium oxide + dilute sulphuric acid $\rightarrow$ _____ + _____

i) sodium hydroxide + dilute hydrochloric acid $\rightarrow$ _____ + _____

j) iron (III) hydroxide + dilute nitric acid $\rightarrow$ _____ + _____

k) sodium hydroxide + ammonium chloride $\xrightarrow{\text{heat}}$ _____ + _____ + _____

l) zinc hydroxide + ammonium sulphate $\xrightarrow{\text{heat}}$ _____ + _____ + _____

m) copper(II) oxide + ammonium nitrate $\xrightarrow{\text{heat}}$ _____ + _____ + _____

n) Magnesium oxide + ammonium chloride $\xrightarrow{\text{heat}}$ _____ + _____ + _____

2) Acidic oxides are _____. They dissolve in water to produce _____ ions.

3) Basic oxides are oxides of _____. _____ are also known as _____. They neutralize _____.

4) An amphoteric oxide may behave _____.
Amphoteric oxides form salts with both _____