The City School

**North Nazimabad Boys Campus**

**Date: 27/03/2015**

**CHEMISTRY**

**CLASS 9**

TYPES OF OXIDES

n oxide is a compound of Oxygen and another element (e.g. through the process of Combustion)

• Metals form Metal Oxides and Non-Metals form Non-Metal Oxides

• Oxides can be classified as either Acidic, Basic, Amphoteric or Neutral

• Nature of the oxides of the elements across the periodic table from left to right changes from Basic –> Amphoteric –> Acidic

ACIDIC OXIDES

Examples:  
SO2, SO3, CO2, NO2

Properties:  
1. Do not react with acids.  
2. React with bases and alkalis to form salt & water.  
3. Dissolve in water to form acidic solutions.  
4. Usually gases at room temp.

BASIC OXIDES

Examples:  
Na2O, CaO, MgO, FeO, CuO

Properties:  
1. Do not react with bases.  
2. React with acids to form salt & water.  
3. Basic Oxides are usually insoluble in water. Those that dissolve in water forms alkaline solutions.

NEUTRAL OXIDES

Examples:  
CO, NO, H2O

Properties:  
1. Neutral pH

AMPHOTERIC OXIDES

Examples:  
Oxides formed with metals near “STEPS” such as ZnO, Al2O3, PbO,

Properties:  
1. React with both acids and bases to form salt & water

For those taking GCE ‘O’ Level syllabus, there are many questions that will come out for this section on Types of Oxides.  
Let’s take a look at some exam-based questions.

Quick Check 1:  
Which of the following reacts with dilute sulphuric acid to give a gas and water as two of the products?  
A. zinc  
B. zinc carbonate  
C. zinc hydroxide  
D. zinc oxide

Quick Check 2:  
Which element forms an oxide that reacts with water to give an acidic solution?  
A. aluminium  
B. sodium  
C. sulphur  
D. zinc

Quick Check 3:  
Which element burns in air to form an oxide which, when shaken with water, gives a solution with a pH greater than 7?  
A. carbon  
B. hydrogen  
C. magnesium  
D. sulphur

**CLASS ASSESSMENT ON TUESDAY (CHMISTRY) All 9th Section**

**TOPIC: ACIDS AND BASES**

**CLASS ASSESSMENT ON Thursday (PHYSICS) only For Class- 9C**

**TOPIC: PRESSURE**