CBSE: 730109
School Code: 23605

AYESHA ALI ACADEMY

A CBSE Senior Secondary Co-Educational School
(Operated By: Ayesha and Ali Padder Foundation, Kanipora Kulgam)
info@aa.academy , admissions@aa.academy
aa.academy - +91 (0) 8082786222 , 01931-295775

WORKSHEET CUM ACTIVITY BASED ASSIGNMENT

Grade : 8th **Subject: CHEMISTRY**

CASE STUDY 01:

A metallurgy laboratory receives Galena (ZnS), Calamine ($ZnCO_3$), and heamitite (Fe_2O_3) , since different methods are being followed for different types of ores,The sulphide ore is heated in presence of excess of oxygen, while the carbonate ore is heated in limited supply of oxygen before reduction.

Q1: Which process is used for ZnS?

Q2: Which process is used for $ZnCO_3$?

Q3: which process is followed after roasting and calcination?

Q4: Name two ores of iron and zinc ?

CASE STUDY 02::

An iron bridge built near the seashore begins to rust after several years. Engineers inspect the bridge and find that the paint has worn off, exposing the iron to moist air. They decide to repaint the bridge and galvanize some of the iron parts to prevent further corrosion.

Q1: Which two conditions are necessary for rusting?

Q2: Why does rusting occur faster near the sea?

Q3: What is galvanization?

Q4: Name two other methods of preventing corrosion.

ACTIVITY 01::

Collect or draw pictures of 10 household objects (such as a spoon, electric wire, water bottle, pencil, matchbox, jewellery, aluminium foil, steel pan, fertilizer bag, and water purifier) and identify:

The metal or non-metal used.

One property that makes it suitable for that use.

Activity 02 : The Missing Metal Challenge

A company has discovered an unknown metal with the following properties:

Found as an oxide ore

More reactive than iron but less reactive than aluminium

Good conductor of electricity

Resistant to corrosion

Task: Suggest the most suitable extraction method, explain your choice, and recommend three practical uses of this metal.