

Re: mineral,ore,rock,metal

Source: <http://sci.tech-archive.net/Archive/sci.chem/2004-12/1519.html>

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Date: 12/28/04

Date: 28 Dec 2004 04:43:04 -0800

edwin wrote:

- > *In fact , I want to know which country this*
- > *web forum belongs to.*

Call it an international forum. There is sci.chem.de which is for the people who know German.

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- > *1)My chemistry book write that:*
- >
- > *The individual chemical*
- > *compounds that make up rocks called minerals. Rocks/minerals from*
- > *which we obtain metals are called*
- > *ores.*
- >
- > *that means ore=rock??*

You could look up any standard English dictionary. An ore is a mineral/or combination of it, from which a metal can be economically extracted.

- > *And rock is composed of mineral??*
- > *can u also tell me the relationship and the difference among*
- > *mineral,ore, rock and metal?*

Rock is a more like general word. Mineral has special meaning, they are naturally occurring substances having a definite (known) chemical composition and distinct properties like color etc. Since the minerals have known constituents they have names too. Ore is a mineral from which you could obtain a metal profitably. Ore and mineral can be used interchangeably in non-scientific discussion.

Are the following your homework questions?

- >*And also which is mixture and which is*
- > *compound??Thx*

You can find this in your book.

- >
- > *b) Would you also tell me the relationship and the difference among*
- > *limestone, calcite and calcium carbonate ?? Also which is mixture and*
- > *which is compound??*

All of them contain calcium carbonate i.e calcium, carbon, oxygen bound chemically together in a fixed ratio. Is it a mixture or a compound?

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- > *2) My book also write that:*
- > *calcium hydroxide is often*
- > *called slaked lime. It is slightly soluble in water .The saturated*
- > *solution formed is called*
- > *limewater.*
- >
- > *Is calcium hydroxide=slaked lime=lime water??*

In a strict sense no. Calcium hydroxide is a solid which can be dissolved in water to give you limewater. Slaked lime is a common name of calcium hydroxide and is not to be preferred.

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- > *3a) calcium carbonate-----heat----->calcium oxide+carbon dioxide*
- >
- > *b) calcium oxide+water--->calcium hydroxide*
- >
- > *c) carbon dioxide+calcium hydroxide--->calcium carbonate+water*
- >
- > *d) calcium carbonate+carbon dioxide+water->calcium hydrogencarbonate*
- >
- > *e) calcium carbonate+dilute hydrochloric acid-->calcium*
- > *chloride+water+carbon dioxide*
- >
- >
- >
- > *May you tell me which is physical change and which chemical change*
- > *from a-e??, thx a lot:P*

A chemical change gives products that are different in chemical & physical properties from the reactants and is accompanied by a new arrangement of atoms. In (a) you heat calcium carbonate and get calcium oxide + carbon dioxide, which are different from calcium carbonate in their chemical and physical properties, carbon dioxide is a colorless gas, calcium oxide is a solid containing calcium and oxygen. Would this be a chemical change or not?