

GEOLOGICAL COLLECTION OF MINERALS AND ROCKS FROM RWANDA

METALLIC ORES

Mineral name : **Coltan (Columbite-Tantalite)**

Valuable Metal: Tantalum and Niobium

Chemical formulae: $[(Fe,Mn)(Ta,Nb)_2O_5]$

Applications: Electronics (capacitors, resistors), alloys, vacuum furnace parts...etc

Deposits Location: Various places in Rutsiro, Muhanga, Kamonyi, Ngororero, Ruhango...etc



Mineral name : **Cassiterite**

Valuable Metal: Tin

Chemical formulae: SnO_2

Applications: Solder, Tin plating, Specialized alloys...etc

Deposits Location: Rutongo, Musha, Ntungwa, Nemba, Gatumba, Rwinkwavu, Bugarura...etc



Mineral name : **Wolframite**

Valuable Metal: Tungsten

Chemical formulae: $(Fe,Mn)WO_4$

Applications: Hard materials, Heavy alloys, high temperature applications...etc

Deposits Location: Nyakabingo, Gifurwe, Bugarama, Giciye, Sebeya, Kabaya, Murundi...etc



Mineral name : **Iron Ore**

Valuable Metal: Iron

Chemical formulae: Fe_2O_3 (Hematite)

Applications: Steel, Metallic alloys, Iron compounds...etc

Deposits Location: Butaro, Gihira, Cyasenge, Kabona, Nganzo, Mushongi, Ngara...etc



Mineral name : **Galena**

Valuable Metal: Lead

Chemical formulae: PbS

Applications: Lead-acid batteries, metallic alloys, solder...etc

Deposits Location: Nyamagabe near Rukarara river, Nyamasheke...etc



Mineral name : **Gold**

Valuable Metal: Gold

Chemical formulae: Au

Applications: Jewelry, Investment, electronic connectors...etc

Deposits Location: Miyove, Nyungwe, Birambo, Bisesero, Musange...etc



Mineral name : **Pyrite**

Valuable Metal: Sulfur

Chemical formulae: PbS

Applications: Production of chemicals (sulfur dioxide, sulfuric acid) ...etc

Deposits Location: Ndago (Karongi), Gatumba (Ngororero)...etc



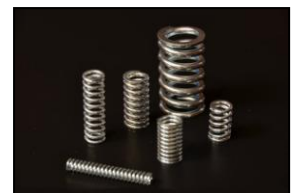
Mineral name : **Beryl (White & Light green)**

Valuable Metal: Beryllium

Chemical formulae: $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$

Applications: Springs, electrical contacts, spot-welding electrodes...etc

Deposits Location: Ngororero, Ruhango, Muhanga...etc



GEMSTONES

Mineral name : **Quartz crystal and Smoky quartz**
Chemical formulae: SiO_2
Applications: Hard-stone carvings, Healing therapy ...etc
Deposits Location: All over the country



Mineral name : **Amethyst**
Chemical formulae: SiO_2
Applications: Jewelry, special glass ...etc
Deposits Location: Nyamasheke, Ngororero, Ruhango...etc



Mineral name : **Aquamarine**
Chemical formulae: $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$
Applications: Jewelry...etc
Deposits Location: Nyamasheke, Ngororero, Ruhango...etc



Mineral name : **Emerald**
Chemical formulae: $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$
Applications: Jewelry...etc
Deposits Location: Nyamasheke, Ngororero, Ruhango...etc



Mineral name : **Topaz**
Chemical formulae: $\text{Al}_2\text{SiO}_4(\text{F,OH})_2$
Applications: Jewelry...etc
Deposits Location: Rusizi, Nyamasheke...etc



Mineral name : **Sapphire**

Chemical formulae: Al_2O_3

Applications: Jewelry...etc

Deposits Location: Karengera (Rusizi), Kagano (Nyamasheke)...etc



Mineral name : **Ruby**

Chemical formulae: Al_2O_3

Applications: Jewelry...etc

Deposits Location: Karengera (Rusizi), Kagano (Nyamasheke)...etc



Mineral name : **Tourmaline (Green, Pink, Black)**

Chemical formulae: Varies

Applications: Jewelry...etc

Deposits Location: Ngororero, Ruhango, Nyamasheke...etc



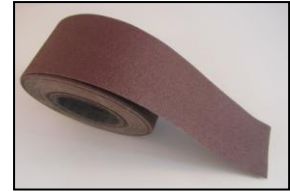
INDUSTRIAL MINERALS AND ROCKS

Mineral name : **Garnet**

Chemical formulae: -

Applications: Jewelry, Used in the industry as Abrasive...etc

Deposits Location: Nyamagabe, Nyaruguru, Gisagara...etc



Mineral name : **Muscovite**

Chemical formulae: $KAl_2(AlSi_3O_{10})(F,OH)_2$

Applications: Paints, Cosmetic, Construction material and Electronics

Deposits Location: All over the country...etc



Mineral name : **Feldspar**

Chemical formulae: $KAlSi_3O_8 - NaAlSi_3O_8 - CaAl_2Si_2O_8$

Applications: Glassmaking, Ceramics, Paint, Plastics...etc

Deposits Location: All over the country...etc



Mineral name : **Kaolin**

Chemical formulae: $Al_2Si_2O_5(OH)_4$

Applications: Ceramics, Toothpaste, Cosmetics, Paper production...

Deposits Location: Rwamagana, Muhanga, Kamonyi, Huye, Ngororero...etc



Rock name : **Travertine**

Chemical formulae: -

Applications: Building materials, cement production...etc

Deposits Location: Bugarama (Rusizi), Mpenge, Mpati, Kigombe, Gitagata...etc



Mineral name : **Talcum**

Chemical formulae: $Mg_3Si_4O_{10}(OH)_2$

Applications: Plastic, paint and coatings, cosmetics, ceramics ...etc

Deposits Location: Kibanda...etc



Mineral name : **Diatomite**

Chemical formulae: $Mg_3Si_4O_{10}(OH)_2$

Applications: Filtration, Abrasive, Pest control...etc

Deposits Location: Nyabitekeri, Nyamirundi...etc



Mineral name : **Vermiculite**

Chemical formulae: $(Mg,Fe^{++},Al)_3(Al,Si)_4O_{10}(OH)_2 \cdot 4(H_2O)$

Applications: Agriculture in soil aeration, House insulation

Deposits Location: Mushubi (Nyamagabe)...etc



DIMENSION STONES

Rock name : Granite, Quartzite, Amphibolite



Applications: Production of construction materials

Deposits Location: All over the country

Rock name : Dolomite



Applications: Production of construction materials, water filtering, fertilizers

Deposits Location: Gitesi, Mbabara (Karongi)

Rock name : Marble



Applications: Production of construction materials

Deposits Location: Gitesi, Mbabara (Karongi)

Rock name : Lava (Volcanic) rocks



Applications: Production of construction materials

Deposits Location: All over the country
