

BAUXITE

Mineral

ALUMINIUM

Bauxite
($\text{Al}_2\text{O}_3 \cdot x\text{H}_2\text{O}$)

Orthoclase feldspar
($\text{K}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2 \cdot 2\text{H}_2\text{O}$)

Muscovite (mica)
($\text{K}_2\text{O} \cdot 3\text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2 \cdot 2\text{H}_2\text{O}$)

Kaolinite
($\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}$)

Leucite
($\text{K}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 4\text{SiO}_2$)



CORUNDUM

Cyanite
($\text{Al}_2\text{O}_3 \cdot \text{SiO}_2$)

Sillimanite
($\text{Al}_2\text{O}_3 \cdot \text{SiO}_2$)

Corundum
(Al_2O_3)

Cryolite
(Na_3AlF_6)

Aluminate
($\text{Al}_2\text{O}_3 \cdot \text{SO}_3 \cdot 9\text{H}_2\text{O}$)



CHROMIUM

Chromite
($\text{FeO} \cdot \text{Cr}_2\text{O}_3$)



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COPPER

Sulphides

• Bornite
($\text{FeS} \cdot 2\text{Cu}_2\text{S} \cdot \text{CuS}$)

✓ Chalcocite
(Cu_2S)

✓ Chalcopyrite
(CuFeS_2)

✓ Covellite
(CuS)

✓ Enargite
($3\text{Cu}_2\text{S} \cdot \text{As}_2\text{S}_5$)

CHALCOPYRITE



GALENA

LEAD

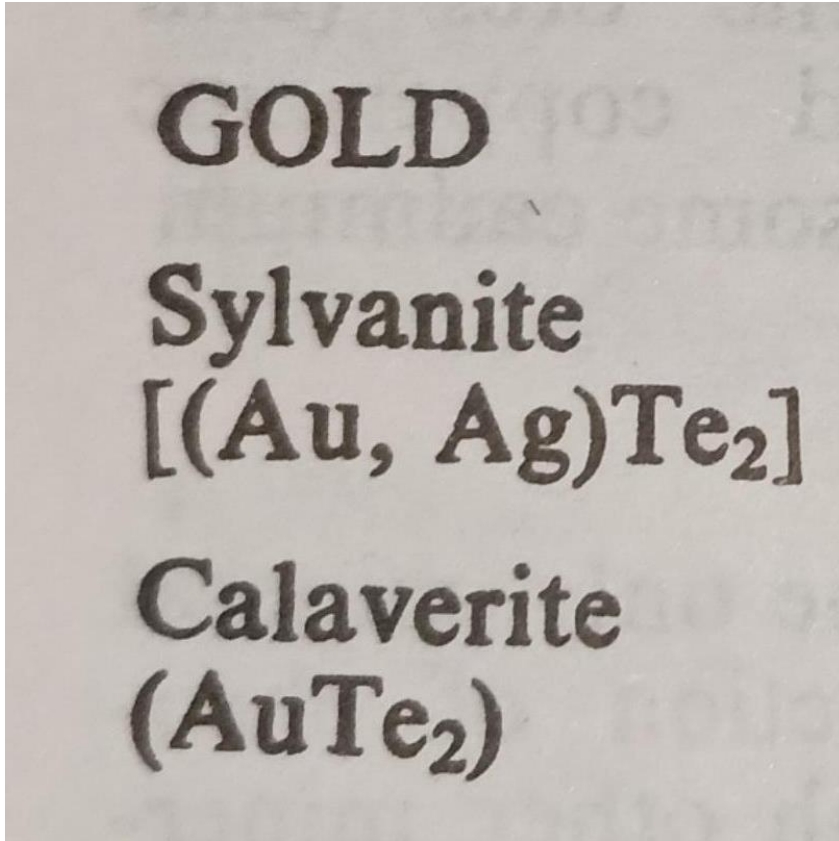
**Galena
(PbS)**

**Cerrusite
(PbCO₃)**

**Anglesite
(PbSO₄)**



SALVANITE



MOLYBDENITE

MOLYBDENUM

Molybdenite
(MoS_2)

Powellite
[$\text{Ca}(\text{Mo}, \text{W})\text{O}_4$]

Wulfenite
(PbMoO_4)



GARNIERITE

NICKEL

Garnierite

$[(\text{Ni}, \text{Mg})\text{SiO}_3 \cdot x\text{H}_2\text{O}]$

Nicolite

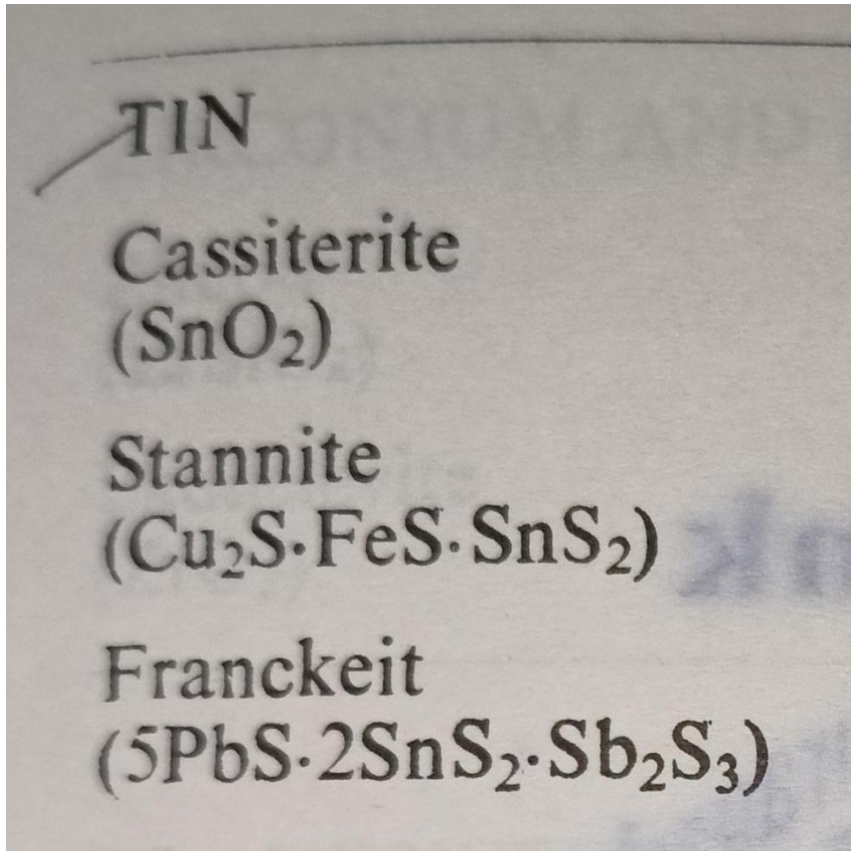
(NiAs)

Pentlandite

$(\text{Fe}, \text{Ni})_9\text{S}_8$



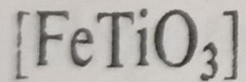
CASSITERITE



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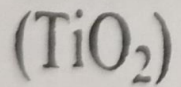
TITANIUM

Ilmenite

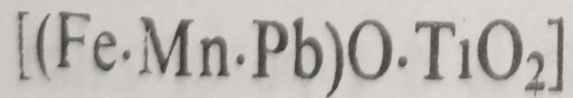


(with Mg sometimes replacing Fe)

Rutile



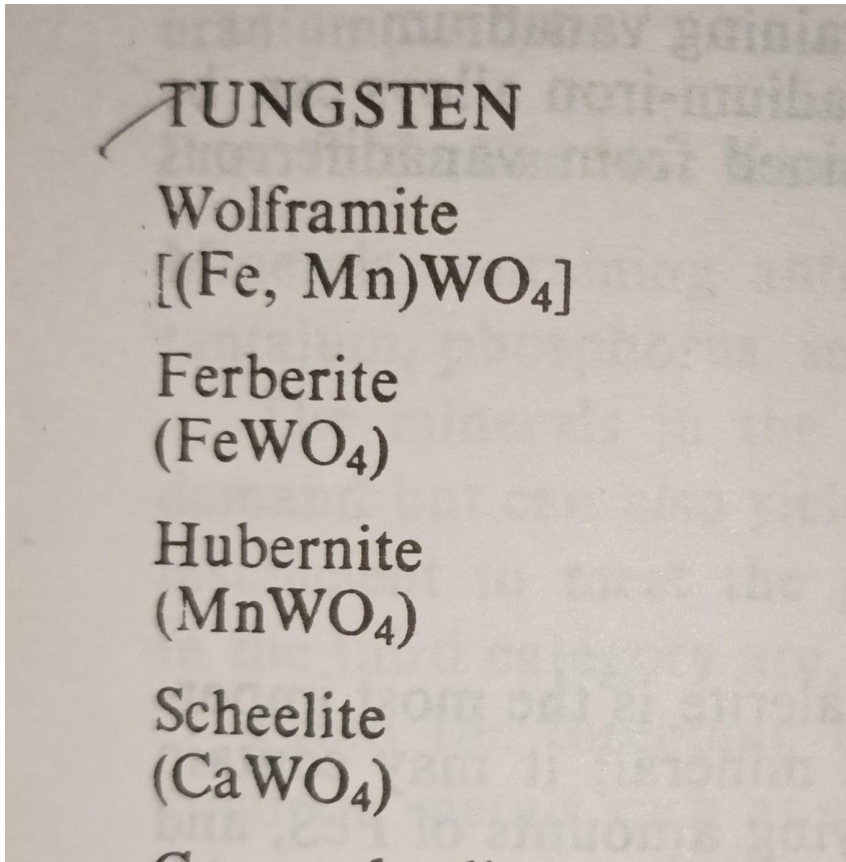
Senaite



ILMENITE



WOLFRAMITE



SPHALERITE

ZINC

Sphalerite
(ZnS)

Zincite
(ZnO)



PATRONITE

VANADIUM

Patronite
(V_2S_5, xS)

Sulvanite
($3Cu_2S \cdot V_2S_5$)

R070737

1 cm

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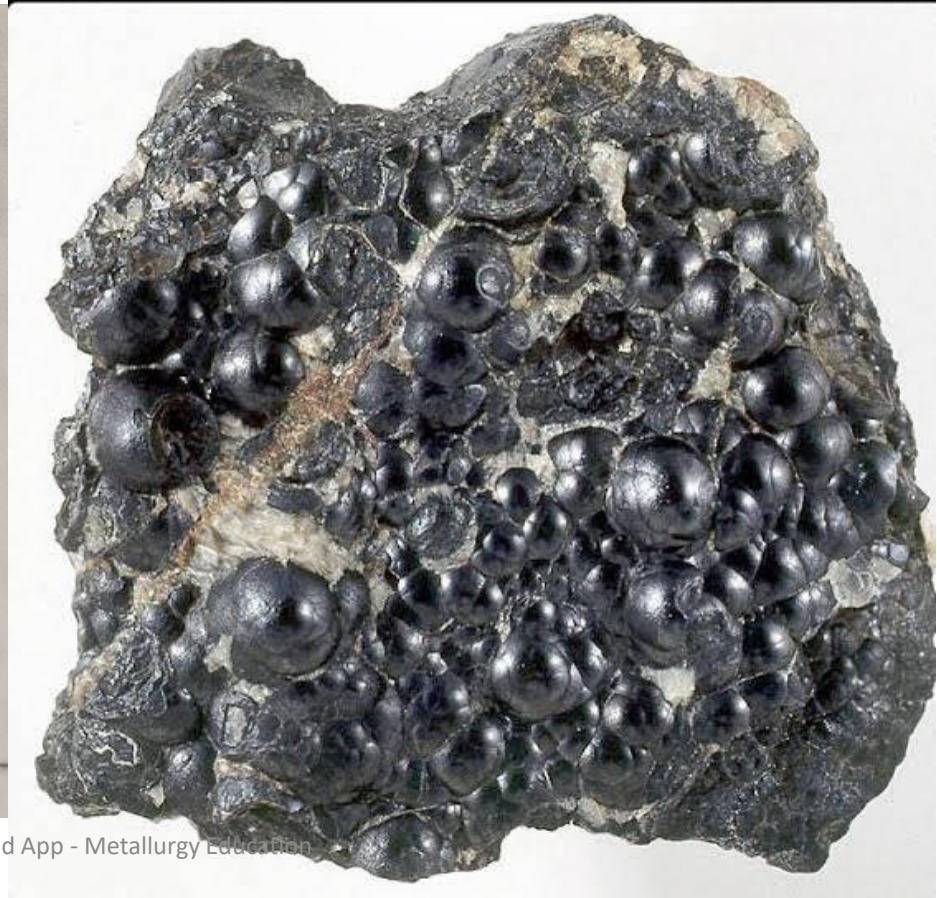
PITCHBLEND

URANIUM

Pitchblende
(U_3O_8)

Uraninite
(UO_2 , UO_3)

Carnotite
($\text{K}_2\text{O} \cdot 2\text{UO}_3 \cdot \text{V}_2\text{O}_5 \cdot x\text{H}_2\text{O}$)



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ZIRCON

