

BLACK ROCK: KS4 INFORMATION FILE - MINERAL IDENTIFICATION AT CROMFORD MINE

COMMON SULPHIDE ORE MINERALS



Galena: PbS is metallic grey and “heavy” (high specific gravity) in obvious cubic crystals. Main sulphide.



Pyrite: FeS_2 is metallic yellow (called Fools' Gold) usually in cubic crystals. Contains 47% iron, but the sulphur makes it worthless as an iron ore.

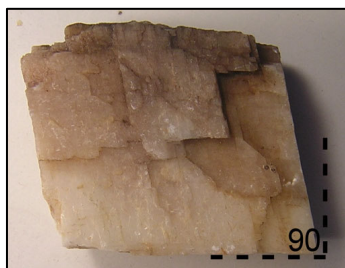


Chalcopyrite: $CuFeS_2$ is brass yellow in colour, often tarnished. Crystals are wedge shaped cubes. Copper content is 35%



Blende: ZnS is black or brown with cubic or tetrahedral crystals. Blende is the most important ore of Zinc.

COMMON GANGUE MINERALS



Calcite: $CaCO_3$ is white and breaks easily into rhombic shapes. (Rhombic cleavage)



Fluorite: CaF_2 is pale or colourless, crystals are cubes with the corners broken off (Octahedral cleavage)



Barytes: $BaSO_4$ is yellowish, and here, with poorly developed flat crystals. Most noticeable by its “heaviness” (high specific gravity)