

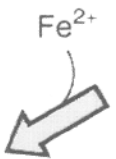
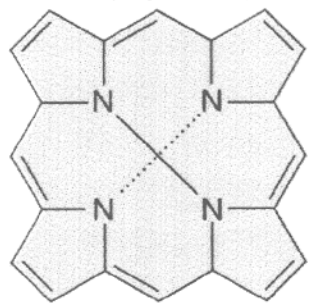
Simple fermentations
 (substrate-level phosphorylation)



Fermentative diversity



Porphyrin ring



Cytochromes



Corrinoids, nickel tetrapyrroles



Bacteriochlorophyll and chlorophyll



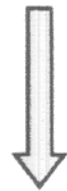
Methanogenesis
 Acetogenesis



Anaerobic respirations
 (SO_4^{2-} , S^0 , Fe^{3+} , NO_3^-
 organic electron acceptors)
 (oxidative phosphorylation)



Anoxygenic (Photophosphorylation)
 photosynthesis
 ↓
 Oxygenic photosynthesis



Aerobic respiration

