

Metals and their Compounds

Lecture 9.1

Corrosion of metals (20.8 BLB)

Metals have many useful physical properties

- strength - girders
- reflective power - headlamps
- electrical conductivity - cables
- stable to heat - engines

But one serious problem - corrosion.

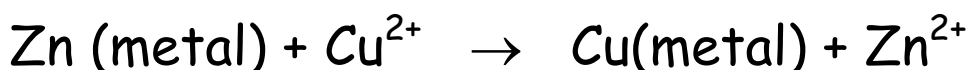
Familiar examples - rusting of iron

green patina on copper

Some metals do not seem to corrode - gold,
aluminium

Why ? Simple answer comes from *activity series*
of metals (Table 4.5 p 145 BLB)

Metals higher up in series will *displace* ones lower
down from solutions of their ions, for example



These reactions are *redox* reactions.