## Metals and their Compounds Lecture 9.3

Corrosion of metals (20.8 BLB)

The activity series is a guide as to how easily metals will corrode.

What atmospheric chemical agents cause corrosion? oxygen  $O_2$ , water  $H_2O$ , carbon dioxide  $CO_2$  sulfur dioxide  $SO_2$ 

For most active metals, either  $O_2$  or  $H_2O$  will cause immediate corrosion

$$2Na + 2H_2O \rightarrow H_2 \uparrow + 2NaOH$$
  
 $4Na + O_2 \rightarrow 2Na_2O$ 

Other metals eg iron need both water and oxygen

