

Activity Series of the Elements

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 Increasing Reactivity

Activity Series of the Elements		
	Activity of metals	Activity of halogen nonmetals
Li Rb K Ba Sr Ca Na	React with cold (liquid) water and acids, replacing hydrogen. React with oxygen to form oxides.	F ₂ Cl ₂ Br ₂ I ₂
Mg Al Mn Zn Cr Fe Cd	React with steam (but not liquid water) and acids, replacing hydrogen. React with oxygen, forming oxides.	
Co Ni Sn Pb	Do not react with water. React with acids, replacing hydrogen. React with oxygen forming oxides.	
H ₂ Sb Bi Cu Hg	React with oxygen, forming oxides Do not react with water Do not react with acids	
Ag Pt Au	Fairly unreactive, forming oxides only indirectly.	

Hints:

For single displacement reactions: examine the element that's by itself and determine if it's higher on the list than it's counterpart (metal with metal or halogen with halogen). If the one by itself is higher than its counterpart you have a reaction.

For oxides: The metal and the oxygen combine to form an oxide compound.

Treat water like "hydrogen hydroxide" (HOH)