

Single Replacement Reactions

<http://group.chem.iastate.edu/Greenbowe/sections/projectfolder/flashfiles/redox/home.html>

Activity 1

SOLID METALS	SOLUTIONS							
	Mg(NO ₃) ₂ (aq)		Zn(NO ₃) ₂ (aq)		Cu(NO ₃) ₂ (aq)		AgNO ₃ (aq)	
Mg (s)	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Cu (s)			Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?
Zn (s)	Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Ag (s)	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	NR	

Look up the solid metals on the Activity Series of metals. Arrange the **solid metals** in order of activities (From most active to least active).

Write the reactions which occurred in Activity 1.

Activity 2

SOLID METALS	SOLUTIONS							
	Fe(NO ₃) ₂ (aq)		Zn(NO ₃) ₂ (aq)		Cu(NO ₃) ₂ (aq)		Pb(NO ₃) ₂ (aq)	
Fe (s)	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Cu (s)	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?
Zn (s)	Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Pb (s)	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	NR	

Look up the solid metals on the Activity Series of metals. Arrange the **solid metals** in order of activities (From most active to least active).

Write the reactions which occurred in Activity 2.

Activity 3

SOLID METALS	SOLUTIONS							
	Fe(NO ₃) ₂ (aq)		Pb(NO ₃) ₂ (aq)		Ni(NO ₃) ₂ (aq)		Sn(NO ₃) ₂ (aq)	
Fe (s)	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Pb (s)	Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?
Ni (s)	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	NR		Is there a reaction?	Is the solid metal more active?
Sn (s)	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	Is there a reaction?	Is the solid metal more active?	NR	

Look up the solid metals on the Activity Series of metals. Arrange the **solid metals** in order of activities (From most active to least active).

Write the reactions which occurred in Activity 3.

Activity 4

	HCl (aq)	If a reaction occurs, rank the speed of the reaction. (1) for the fastest reaction, (2) for the 2 nd fastest reaction, etc.
Ag (s)		
Cu (s)		
Fe (s)		
Mg (s)		
Ni (s)		
Pb (s)		
Sn (s)		
Zn (s)		

Look up the solid metals on the Activity Series of metals. Arrange the **solid metals** in order of activities (From most active to least active).

Write the reactions which occurred in Activity 4.