



| | Tab Activity | le J Series** | |
|----------------------|---|---------------------------|-----------------|
| Most Active | Metals | Nonmetals | l. |
| I | Li | F ₂ | I I |
| | Rb | Cl ₂ | |
| | K | Br ₂ | |
| | Cs | I_2 | I |
| | Ba | | |
| | Sr | | |
| | Ca | | 1 1 |
| | Na | | 1 1 |
| | Mg | | 1 1 |
| | Al | | |
| | Ti | | |
| | Mn | | |
| | Zn | | 1 1 |
| | Cr | | 1 1 |
| | Fe | | |
| | Co | | |
| | Ni | | 1 1 |
| | Sn | | 1 1 |
| | Pb | | 1 1 |
| | H ₂ | | 11 |
| | Cu | | 1 1 |
| | | | I |
| + | Ag | | ↓ |
| Least Active | Au | | Least Active |
| **Activi standare | ity Series is base d. H ₂ is <i>not</i> a m | ed on the hydros etal. | gen |

Comprehension Questions

• What is a voltaic cell?

• What is an electrolytic cell?

3

Comprehension Questions

 Which electrochemical cell is spontaneous? Which electrochemical cell is non-spontaneous?

• What happens when something is oxidized? What happens when something is reduced?

Comprehension Questions

• What occurs at the anode? What occurs at the cathode?

• What is the function of the salt bridge?

5

Comprehension Questions

• Which way to do the electrons travel to?

 How can Table J be used to determine the anode and cathode? Using Table J Questions

• Cu & Zn

is the anode and is being because electrons are

____·

• _____ is the cathode and is being

because electrons are

____.

7

| TT. ' | Most | Metals | Nonmetal |
|--|-----------------|-----------------|-----------------|
| Using Table J Questions | Active | Li | F ₂ |
| , - | | Rb | Cl ₂ |
| | | K | Br ₂ |
| | | Cs | I ₂ |
| Pb & Zn | | Ba | |
| | | Sr | |
| to the constant of the first of | | Ca | |
| is the anode and is being | | Na | |
| | | Mg | |
| because electrons are | | Al | |
| | | Ti | |
| | | Mn | |
| · | | Zn | |
| | | Cr Fe | |
| | | Co | |
| | | Ni Ni | |
| is the cathode and is being | | Sn | |
| is the eathede and is semig | | Pb | |
| because electrons are | | H. | |
| Decause electrons are | | Cu | |
| | | Ag | |
| · | Least Active | Au | |
| | | ty Series is bu | |

| | | ble J Series** | | |
|--|-----------------|---|-----------------------------|-----------------|
| TT. ' M-1-1 - T 🔿 (' | Most | Metals | Nonmetals | Most |
| Using Table J Questions | Active | Li | F ₂ | Active |
| | | Rb | Cl ₂ | |
| | | K | Br ₂ | |
| | | Cs | I ₂ | |
| • Ba & Li | | Ba | | |
| | | Sr Ca | | |
| is the anode and is being | | Na Na | | |
| is the aroae and is being | | Mg | | |
| because electrons are | | Al | | |
| Decause electrons are | | Ti | | |
| | | Mn | | |
| · | | Zn | | |
| | | Cr | | |
| | | Fe | | |
| | | Co | | |
| to the confirmation of the feeting | | Ni | | |
| is the cathode and is being | | Sn | | |
| | | Pb | | |
| because electrons are | | H ₂ | | |
| | | Cu Ag | | |
| · | Least Active | Au | | Least Active |
| | | ty Series is bas l. H ₂ is <i>not</i> a r | sed on the hydrog netal. | gen |

| TT. ' | Most | Metals | Nonmetals | |
|--|--------|----------|-----------------|------|
| Using Table J Questions | Active | Li | F ₂ | Acti |
| | | Rb | Cl ₂ | ll |
| | | K | Br ₂ | ΙI |
| | | Cs | I ₂ | ΙI |
| • Mn & Zn | | Ba | | ΙI |
| 1111 & 211 | | Sr | | ш |
| to the constant of the first of | | Ca | | |
| is the anode and is being | | Na | | |
| | | Mg | | |
| because electrons are | | Al | | |
| | | Ti Mn | | |
| | | Zn | | |
| | | Cr | | |
| | | Fe | | |
| | | Co | | |
| | | Ni | | |
| is the cathode and is being | | Sn | | |
| | | Pb | | |
| because electrons are | | H_2 | | |
| Decause elections are | | Cu | | |
| | | Ag | | |
| | Least | Au | | Le |

| | | Table J Activity Series** | | |
|--|------------------|--|-------------------|------|
| lain a Malala I Ou antions | Most | Metals | Nonmetals | Mo |
| sing Table J Questions | Active | Li | F ₂ | Acti |
| <i>J</i> | | Rb | Cl ₂ | ш |
| | | K | Br ₂ | Ш |
| | | Cs Ba | I ₂ | Ш |
| Fe & Zn | | Sr | ll . | |
| | | Ca | ll . | |
| is the anode and is being | | Na | | |
| | | Mg | | |
| because electrons are | | Al | | |
| | | Ti | ll . | |
| | | Mn | ll . | |
| | | Zn Cr | ll . | |
| | | Fe | ll . | |
| | | Co | ll . | |
| | | Ni | ll . | |
| is the cathode and is being | | Sn | | |
| | | Pb | ll . | |
| because electrons are | | H ₂ | | |
| | | Cu | ll . | |
| | , † . | Au | | L |
| | Least Active | | | Ac |
| | | ty Series is bas I. H _o is not a n | sed on the hydrog | gen |

| | | Table J Activity Series | | |
|--|-----------------|------------------------------|------------------|-----------------|
| TT. ' M. I. I T. O (' | Most | Metals | Nonmetals | |
| Ising Table J Questions | Active | Li | F ₂ | Active |
| | | Rb | Cl ₂ | |
| | | К | Br ₂ | |
| | | Cs | I ₂ | |
| Co & Ca | | Ba | | |
| | | Sr | | |
| • is the anode and is being | | Ca Na | | |
| is the aroue and is being | | Mg | | |
| because electrons are | | Al | | |
| Decause electrons are | | Ti | | |
| | | Mn | | |
| · | | Zn | | |
| | | Cr | | |
| | | Fe | | |
| | | Co | | |
| Conference of the Assess A Conference | | Ni | | |
| is the cathode and is being | | Sn | | |
| | | Pb | | |
| because electrons are | | H ₂ | | |
| | | Cu | | |
| | ŧ | Ag Au | | + |
| | Least Active | Au | | Least Active |
| | **Activ | ity Series is bas | ed on the hydrog | gen |
| | standare | d. H ₂ is not a n | netal. | |

| | | Table J Activity Series** | | |
|--|-----------------|------------------------------|-----------------|-------|
| TT. ' M. I. I T O C | Most | Metals | Nonmetals | Mos |
| Using Table J Questions | Active | Li | F ₂ | Activ |
| 3 3 | | Rb | Cl ₂ | ш |
| | | к | Br ₂ | ш |
| | | Cs | I ₂ | ш |
| • Co & Ni | | Ba Sr | ll . | ш |
| | | Ca | ll . | ш |
| is the anode and is being | | Na | ll . | H |
| | | Mg | | ш |
| because electrons are | | Al | ll . | Ш |
| | | Ti | ll . | Ш |
| | | Mn | ll . | Ш |
| | | Zn Cr | | Ш |
| | | Fe | ll . | |
| | | Co | ll . | |
| | | Ni | | |
| is the cathode and is being | | Sn | ll . | |
| | | Pb | ll . | |
| because electrons are | | H ₂ | ll . | |
| | | Cu Ag | | |
| | . + . | Au | ll . | |
| | Least Active | | | Act |

| | | Table J Activity Series** | | |
|--|-----------------|------------------------------|-----------------|-----|
| TTaire as Malala T Ossa asti assa | Most | Metals | Nonmetals | |
| Using Table J Questions | Active | Li | F ₂ | Act |
| · · · · · · · · · · · · · · · · · · · | | Rb | Cl ₂ | ш |
| | | K | Br ₂ | |
| | | Cs | I ₂ | |
| • Cu & Mg | | Ba | II | |
| 3 | | Sr | II | |
| is the anode and is being | | Ca Na | II | |
| is the anode and is being | | Mg | II | |
| h 1 t | | Al | II | |
| because electrons are | | Ti | II | |
| | | Mn | II | |
| • | | Zn | II | |
| | | Cr | II | |
| | | Fe | II | |
| | | Co | II | |
| | | Ni | II | |
| is the cathode and is being | | Sn | II | |
| | | Pb | II | |
| because electrons are | | H_2 | II | |
| Docume clositons are | | Cu | II | |
| | ļ | Ag | II | |
| • | Least Active | Au | II | Le |

| | | Tal Activity | | |
|--|-----------------|---------------------|-----------------|-----------------|
| IIain a Malala I Ou antions | Most | | Nonmetals | Most Active |
| Using Table J Questions | Active | Li | F ₂ | I |
| J | | Rb | Cl ₂ | |
| | | K | Br ₂ | |
| | | Cs | I ₂ | |
| • Zn & Al | | Ba Sr | | |
| | | Ca | | |
| is the anode and is being | | Na Na | | |
| | | Mg | | |
| because electrons are | | Al | | |
| | | Ti | | |
| | | Mn | | |
| · | | Zn | | |
| | | Cr | | |
| | | Fe Co | | |
| | | Ni Ni | | |
| is the cathode and is being | | Sn | | |
| | | Pb | | |
| because electrons are | | H ₂ | | |
| because electrons are | | Cu | | |
| | Ţ | Ag | | |
| · | Least Active | Au | | Least Active |
| | **Activ | vity Series is base | | |