

Reactivity Series of Metals and Halogens

| Metal | Reactivity in Single Replacement Rxns | Halogen |
|--|--|---|
| Lithium Potassium Barium Calcium Sodium Magnesium Aluminum Manganese Zinc Chromium Iron Cadmium Cobalt Nickel Tin Lead Hydrogen Copper Silver Mercury Platinum Gold | <p>react vigorously in H₂O to produce H₂</p> <p>react with steam to form H₂</p> <p>react with simple acids to form H₂</p> <p>will not dissolve in simple acids</p> <p>Decreases</p> <p>melting and boiling point increases</p> <p>solubility in water increases</p> <p>increasing strength of oxidizing agent</p> <p>Metals that are above metals in compounds will be replaced.</p> <p>Halogens that are above halogens in compounds will be replaced.</p> | Fluorine Chlorine Bromine Iodine Astatine |