**Honors Chemistry II: Qualitative Tests**

**Common Tests for Gases**

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| **GAS** | **TEST** |
| Hydrogen | Squeaky pop with lighted splint |
| Oxygen | Re-lights glowing splint |
| Carbon Dioxide | Turns limewater (Calcium carbonate) milky |
| Ammonia | Pungent odor (windex smell), turns red litmus paper blue, gives dense white fumes in contact with HCl fumes |

**Common Tests for Cations and Anions**

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| **ION** | **TEST** |
| Carbonate and bicarbonate | Release CO2 gas with acid |
| Sulfate | White ppt of BaSO4 with barium ions |
| Chloride | White ppt of AgCl with silver ions |
| Bromide | Cream ppt of AgBr with silver ions |
| Iodide | Yellow ppt of AgI with silver ions |
| Ammonium | NH3 released with Hydroxide ions |