

What makes something acidic or basic?

1. Name each of the following binary acids:

- HCl hydrochloric acid
- H₂S hydrosulfuric acid



2. Name each of the following oxyacids:

- HNO₃ nitric acid
- H₂SO₄ sulfuric acid
- HClO₃ chloric acid
- HNO₂ nitrous acid



3. Write the formulas for each of the following binary acids:

- hydrofluoric acid HF
- hydroiodic acid HI



4. Write the formulas for each of the following oxyacids:

- perbromic acid HBrO₄
- chlorous acid HClO₂
- phosphoric acid H₃PO₄
- hypochlorous acid HClO



Strong Bases

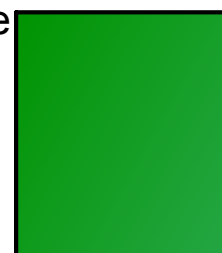
Write out the formulas/ names of these **strong** bases:

- | | |
|------------------------|---------------------|
| 5. LiOH | lithium hydroxide |
| 6. calcium hydroxide | Ca(OH) ₂ |
| 7. KOH | potassium hydroxide |
| 8. sodium hydroxide | NaOH |
| 9. Mg(OH) ₂ | magnesium hydroxide |

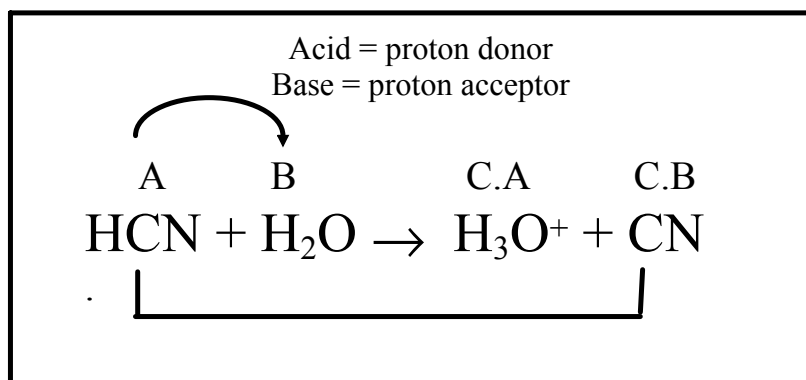


Write out the formulas/ names of these **weak** bases:

- | | |
|-------------------------|-----------------------|
| 10. Iron (II) hydroxide | Fe(OH) ₂ |
| 11. ammonia | NH ₃ |
| 12. Al(OH) ₃ | aluminum hydroxide |
| 13. Be(OH) ₂ | beryllium hydroxide |
| 14. Cu(OH) ₂ | Copper (II) hydroxide |



BRONSTED-LOWERY: A way to produce hydronium and hydroxide ions.



1. How many ways can an acid produce hydronium ions? Explain.



2. How many different ways can bases produce hydroxide ions? Explain.

