

Name _____

Naming Common Acids and Bases Answer Key

Instructions: Given the chemical formula and a brief description of its use, name the acid or base.

While the chemical formula primarily dictates the name, sometimes the context of the acid or base's application or use can further guide or refine the naming, especially for common names. For instance, acetic acid is the systematic name for CH_3COOH , but its common name is derived from its use in vinegar.

Similarly, the use can give insight into which acid or base might be referred to even if the specific formula isn't mentioned. For example, if one mentions a strong acid used in car batteries, one can infer it to be sulfuric acid (H_2SO_4)

| Chemical Formula | Common Uses | Name It |
|--------------------------|--|---------------------|
| HCl | Used in labs for various reactions and to regulate pH in swimming pools. | Hydrochloric Acid |
| H_2SO_4 | Found in car batteries. | Sulfuric Acid |
| HNO_3 | Used in making fertilizers and explosives. | Nitric Acid |
| CH_3COOH | Gives vinegar its sour taste. | Acetic Acid |
| H_2CO_3 | Forms when carbon dioxide dissolves in water. | Carbonic Acid |
| H_3PO_4 | Used as a flavoring agent in sodas. | Phosphoric Acid |
| H_2S | Rotten eggs smell. | Hydrogen Sulfide |
| NH_4SOH | Household cleaning agent. | Ammonium Hydroxide |
| NaOH | Used in soap making. | Sodium Hydroxide |
| KOH | Utilized in biodiesel production. | Potassium Hydroxide |
| HBr | Used in synthesis of organic compounds. | Hydrobromic Acid |
| HF | Used for etching glass. | Hydrofluoric Acid |
| $\text{Ba}(\text{OH})_2$ | Used in laboratories for titration. | Barium Hydroxide |
| H_2CrO_4 | Used as an oxidizing agent in labs. | Chromic Acid |
| HClO_4 | Strong acid used in rocket propellant. | Perchloric Acid |