## ESTEME STEM Squad <br> Acid-Base Mystery Solutions

## Terms:

pH- a measure of how basic or acidic something is indicator- a substance that changes color to indicate its pH
$\mathbf{H}^{+}$hydronium, the molecule created by acids in water
$\mathbf{O H}$ - hydroxide, the molecule created by bases in water
Neutralization- bringing a substance to a neutral pH of 7

## Acid

Common traits: tasting sour, corrosive

## Base

When you put acids into water you build up $\mathrm{H}^{+}$or
Common traits: slippery, bitter-tasting
hydronium
When you put bases into water you build up $\mathrm{OH}^{-}$
or hydroxide

Common Acids: soft drinks, citrus, vinegar
Common Bases: bleach, soaps, toothpaste

## The pH Scale



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Possible Unknown Acids and Bases

| Acidic |  |  |  |  |  |  |  | Neutral |  |  |  |  | Basic |  |  | 14 |
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| 0 | 1 | 2 | 3 | 4 |  | 5 | 6 | 7 | 8 |  | 9 | 10 | 11 | 12 | 13 |  |
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