Acids vs Bases

* All chemicals are either an acid, a base or neutral.
* Strong acids and strong bases can be dangerous and are capable of eating through or melting solids.
* Weak acids and weak bases are safe! There are many examples of weak acids and weak bases in every kitchen.
* Sometimes you can recognize acids and bases based on their taste or feeling.
  + Weak acids typically taste sour.
  + Weak bases have a slimy or soapy feeling.

|  |  |  |
| --- | --- | --- |
| Chemical | Prediction: Acid, Base or Neutral? | Results: Acid, Base or Neutral? |
| Water |  |  |
| Egg White |  |  |
| Lemon Juice |  |  |
| Baking Soda |  |  |
| Vinegar |  |  |
| Milk |  |  |

**Acid + Base Chemical Reactions**

Which of these combinations clearly had a chemical reaction?

Put a **✔** if there was a reaction.

Put a **X** if there was no evidence of reaction.

|  |  |  |  |
| --- | --- | --- | --- |
|  | BAKING SODA  ( ) | WATER  ( ) | VINEGAR  ( ) |
| EGG YOLK  ( ) |  |  |  |
| LEMON JUICE  ( ) |  |  |  |

Based on the evidence…

do acids react with acids? YES / NO

do bases react with bases? YES / NO

do acids react with bases? YES / NO

do acids react with water? YES / NO

do bases react water? YES / NO