

Interactive Worksheet: Introduction to Acid and base

Name: _____

Grade: _____

Part 1: Natural (Organic) Acids in Food

Complete the table by identifying the specific organic acid found in each natural source

Natural Source Organic Acid Present

Vinegar	[Acetic Acid]
Lemon	[Citric Acid]
Orange	[Ascorbic Acid]
Tamarind	[Tartaric Acid]
Tomato	[Oxalic Acid]
Sour Milk (Curd)	[Lactic Acid]
Grapes	[Tartaric Acid]
Apples	[Malic Acid]

Part 2: The Indicator Challenge

Fill in the resulting color change for each indicator when it reacts with an Acid or a Base.

Indicator	Color in Acidic Solution	Color in Basic Solution
Blue Litmus Paper	[Red]	Stays Blue
Red Litmus Paper	Stays Red	[Blue]
Turmeric (Powder/Paper)	Stays Yellow	[Red / Brown]
Phenolphthalein	[Colorless]	[Pink / Magenta]
Methyl Orange	[Red / Pink]	[Yellow]
China Rose (Hibiscus)	[Dark Pink]	[Green]

Part 3: Properties of Acids (True or False)

Tick the correct box for each statement.

Statement	True	False
1. Mineral acids like Sulphuric acid are safe to taste.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Organic acids are naturally occurring and generally weak.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3. Acids react with metals to release Carbon Dioxide gas.
4. Concentrated mineral acids can cause severe burns on the skin.
5. All substances that taste sour are strong mineral acids.
6. Diluting an acid involves adding water to the acid very quickly.

Part 4: Matching the Properties

Draw a line to match the term with its correct description.

Neutralization \leftarrow -> Reaction between an acid and a base to form salt and water.

Corrosive \leftarrow -> Property of strong acids that allows them to eat away at surfaces.

Alkali \leftarrow -> A base that is specifically soluble in water.

Litmus \leftarrow -> A natural indicator extracted from Lichens.