

UNIT
1VIDEO
1*Modern Marvels: Acid*

As you watch the movie, answer the following questions. The questions are in order.

1. List at least 3 uses of acid. Production of plastics, film, textiles, fertilizers, explosives, industrial cleaning, etc.
2. What is one of the most dangerous acids? What is it commonly used for? Nitric acid. It is commonly used in explosives as a catalyst.
3. What is a strong acid? A strong acid is one in which there is a high concentration of hydrogen ions (H⁺).
4. A solution with a pH higher than 7 is a(n) base, while a solution with a pH lower than 7 is a(n) acid.
5. Why should you never mix water with acid? It releases dangerous amounts of heat.
6. What happens when sulfuric acid comes in contact with sugar? It dehydrates the sugar; it removes the hydrogen and oxygen from the sugar leaving only the carbon behind.
7. What are some industrial uses of sulfuric acid? Petroleum production, bleaching, paper/pulp production, industrial cleaning.
8. What 3 elements are found in sulfuric acid? Hydrogen, Oxygen, Sulfur
9. How long did it take for hydrochloric acid to disintegrate animal tissue (in this case, a hotdog)? Nine hours.
10. Gelatin is a result of, in part, hydrochloric acid. What are some uses of gelatin? Producing pharmaceuticals, golf balls, food, and film.
11. What is the pH of oranges? 3.8 Ginger ale? 3 Cola? 2.6
12. Vinegar, like other acids, has what taste? Sour
13. What is passivation? A process that removes impurities from the surface of metal and permanently sterilizes it.
14. What does the filter remove from the acid? Metallic salts
15. What is aqua regia used for? Removing precious metals
16. What is muriatic acid also known as? Hydrochloric acid