

Solutions.

Molarity = moles/L % (w/vol) = grams/100 mL, % (w/w) = g/100grams

If a solution is 5%(w/v) glucose, then there are 5 grams of glucose in 100 mL of the solution.

1. Convert ppm (1 part per million parts) to mass/volume
2. Convert ppb (1 part per billion parts) to mass/volume
3. What is the molarity of a solution that is made by diluting 10.0 mL of 0.2M sodium hydroxide to a total volume of 50 mL?
4. What is the molarity of a solution that is made by diluting 25.00 mL of 3.00M hydrochloric acid (HCl) to 500.0 mL?

5. Naming acids

Hydrochloric acid = HCl

Hydrobromic acid = HBr

Hydrofluoric acid = _____

Oxyacids are based on oxyanions:

Carbonic acid = H₂CO₃

Sulfuric acid = H₂SO₄

Nitric acid = HNO₃

sulfurous acid = H₂SO₃

nitrous acid = HNO₂

Hypochlorous acid = _____ Chlorous acid = _____

Chloric acid = _____ Perchloric acid = _____

6. Acid + Base → _____ + _____

What is the molarity of a sodium hydroxide solution, if 22.34 mL was needed to titrate 20.00 mL of a 0.1221 M solution of hydrochloric acid?