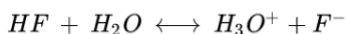


## Quiz for Video 3 – Acids and Bases

1. The Bronsted-Lowry definition of acids and bases revolves around the transfer of what?

- a. Protons (H<sup>+</sup>)
- b. Electrons (e<sup>-</sup>)
- c. Positrons (e<sup>+</sup>)
- d. Water (H<sub>2</sub>O)

2. The following diagram shows HF acting as:



- a. An acid
- b. A base
- c. A neutralizer
- d. An autoionizer

3. What does it mean if we have a STRONG acid, but it's not very corrosive (safe to work with)?

- a. The acid is not actually strong
- b. The acid is mixed with something else
- c. The acid is dilute
- d. The acid is concentrated

4. What is the conjugate acid of water (H<sub>2</sub>O)?

- a. H<sub>3</sub>O<sup>+</sup>
- b. OH<sup>-</sup>
- c. H<sub>2</sub>O
- d. O<sub>2</sub>

5. For the basic azide ion: N<sub>3</sub><sup>-</sup> which of the following correctly represents its conjugate acid?

- a. HN
- b. HN<sub>3</sub><sup>+</sup>
- c. HN<sub>3</sub>
- d. HNO<sub>3</sub>

6. Water is amphoteric meaning it can act as both an acid or base. What determines if water acts as either an acid or a base?

- a. The Temperature
- b. The number of moles of water present
- c. The shape of the container
- d. The acidity of other species present

7. If one mole of HCl (a strong acid) goes into aqueous solution, how much H<sup>+</sup> will be formed?

- a. 1 mole
- b. 2 moles
- c. 36.5 moles
- d. Impossible to tell

8. What is “weak” about a weak acid?

- a. It is not corrosive
- b. It dissociates only partially
- c. It has a low molar mass
- d. It has low intermolecular forces

9. What does the word “conjugate” most closely mean?

- a. Corresponding
- b. Base
- c. Opposite
- d. Negligible

10. When we have a Na<sup>+</sup> or K<sup>+</sup> as the cation of an ionic compound, what does this mean?

- a. The compound is acidic
- b. The compound is a metal
- c. The compound will dissociate completely
- d. The compound has a large molar mass