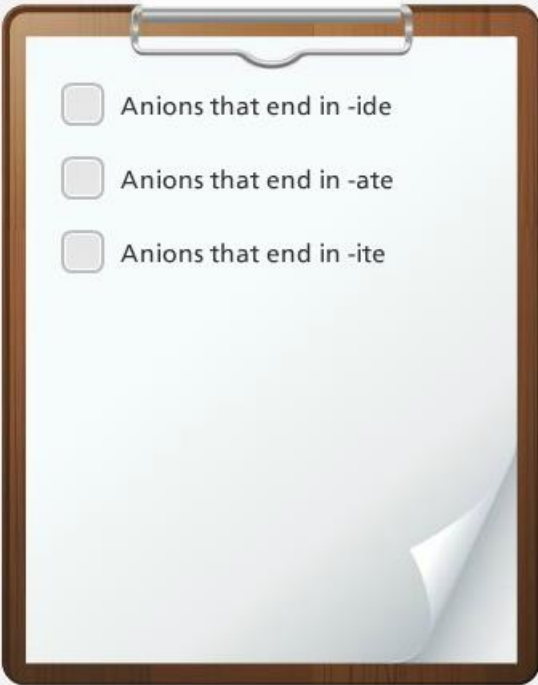


Module 11: Acid/Bases, Neutralization, and Redox Reactions

Topic 2 Content: Naming Acids Notes

Introduction

Naming Acids



- Anions that end in -ide
- Anions that end in -ate
- Anions that end in -ite

Introduction

The naming of acids is based on the anion. Anions are either monatomic or polyatomic. All monatomic ions end with -ide. Polyatomic ions end in either -ate or -ite. In this activity, click the checkboxes from the clipboard to examine the three rules used for naming an acid.

The naming of acids is based on the anion. Anions are either monatomic or polyatomic. All monatomic ions end with -ide. Polyatomic ions end in either -ate or -ite. In this activity, click the checkboxes from the clipboard to examine the three rules used for naming an acid.

Module 11: Acid/Bases, Neutralization, and Redox Reactions

Topic 2 Content: Naming Acids Notes

Anions that end in -ide

Naming Acids

- Anions that end in -ide
- Anions that end in -ate
- Anions that end in -ite

Anions that end in -ide

When an anion ends in *-ide*, the acid name will begin with the prefix *hydro-*. The prefix is followed by the root of the anion name. The root of the anion name is followed by the suffix *-ic*. For example, HCl is hydrochloric acid. The prefix is *hydro*, root of the anion is *chlor*, and the suffix is *-ic*. What is the name of HCN? Again, the prefix is *hydro*, root of the anion (CN⁻) is *cyan* for cyanide, and the suffix is *-ic*. HCN is known as hydrocyanic acid.

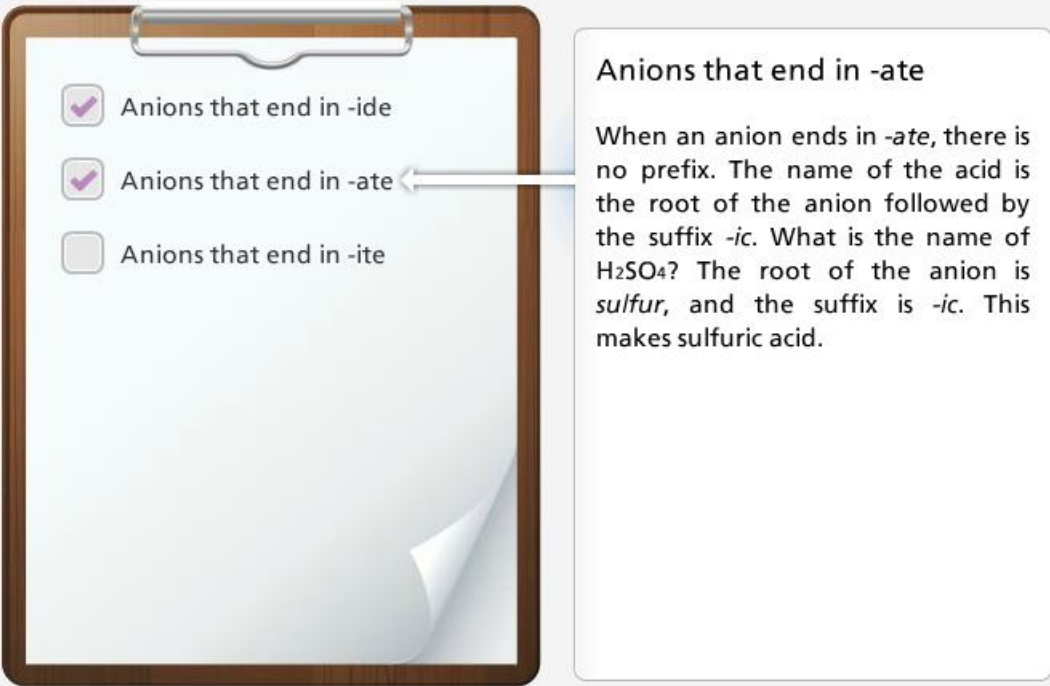
When an anion ends in *-ide*, the acid name will begin with the prefix *hydro-*. The prefix is followed by the root of the anion name. The root of the anion name is followed by the suffix *-ic*. For example, HCl is hydrochloric acid. The prefix is *hydro*, root of the anion is *chlor*, and the suffix is *-ic*. What is the name of HCN? Again, the prefix is *hydro*, root of the anion (CN⁻) is *cyan* for cyanide, and the suffix is *-ic*. HCN is known as hydrocyanic acid.

Module 11: Acid/Bases, Neutralization, and Redox Reactions

Topic 2 Content: Naming Acids Notes

Anions that end in -ate

Naming Acids



The graphic shows a clipboard with a checklist on the left and a text box on the right. The checklist has three items: 'Anions that end in -ide' (checked), 'Anions that end in -ate' (checked), and 'Anions that end in -ite' (unchecked). An arrow points from the second item to the text box. The text box explains that for anions ending in -ate, there is no prefix, and the acid name is the root of the anion followed by -ic. It uses H₂SO₄ as an example, identifying the root as sulfur and the suffix as -ic, resulting in sulfuric acid.

- Anions that end in -ide
- Anions that end in -ate
- Anions that end in -ite

Anions that end in -ate

When an anion ends in *-ate*, there is no prefix. The name of the acid is the root of the anion followed by the suffix *-ic*. What is the name of H₂SO₄? The root of the anion is *sulfur*, and the suffix is *-ic*. This makes sulfuric acid.

When an anion ends in *-ate*, there is no prefix. The name of the acid is the root of the anion followed by the suffix *-ic*. What is the name of H₂SO₄? The root of the anion is *sulfur*, and the suffix is *-ic*. This makes sulfuric acid.

Module 11: Acid/Bases, Neutralization, and Redox Reactions

Topic 2 Content: Naming Acids Notes

Anions that end in -ite

Naming Acids

- Anions that end in -ide
- Anions that end in -ate
- Anions that end in -ite

Anions that end in -ite

Anions ending with *-ite* also have no prefix. The name of the acid is the root of the anion followed by the suffix *-ous*. What is the name of HNO_2 ? NO_2 is the nitrite ion with the root *nitro*. The suffix for this anion is *-ous*. HNO_2 is known as nitrous acid.

Anions ending with *-ite* also have no prefix. The name of the acid is the root of the anion followed by the suffix *-ous*. What is the name of HNO_2 ? NO_2 is the nitrite ion with the root *nitro*. The suffix for this anion is *-ous*. HNO_2 is known as nitrous acid.