

Acid Naming Worksheet Answer Key PDF

Acid Naming Worksheet Answer Key PDF

Disclaimer: The acid naming worksheet answer key pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at max@studyblaze.io.

Part 1: Building a Foundation

What is the definition of an acid?

undefined. A) A substance that releases hydroxide ions in water

undefined. B) A substance that releases hydrogen ions in water ✓

undefined. C) A substance that releases oxygen ions in water

undefined. D) A substance that releases sodium ions in water

An acid is defined as a substance that releases hydrogen ions in water.

What is the definition of an acid?

undefined. A) A substance that releases hydroxide ions in water

undefined. B) A substance that releases hydrogen ions in water ✓

undefined. C) A substance that releases oxygen ions in water

undefined. D) A substance that releases sodium ions in water

An acid is defined as a substance that releases hydrogen ions in water.

What is the definition of an acid?

undefined. A) A substance that releases hydroxide ions in water

undefined. B) A substance that releases hydrogen ions in water ✓

undefined. C) A substance that releases oxygen ions in water

undefined. D) A substance that releases sodium ions in water

An acid is defined as a substance that releases hydrogen ions in water.

Which of the following are examples of binary acids?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Sulfuric acid (H_2SO_4)

undefined. C) Hydrobromic acid (HBr) ✓

undefined. D) Nitric acid (HNO_3)

Binary acids consist of hydrogen and one other nonmetal element.

Which of the following are examples of binary acids?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Sulfuric acid (H_2SO_4)

undefined. C) Hydrobromic acid (HBr) ✓

undefined. D) Nitric acid (HNO_3)

Binary acids consist of hydrogen and one other nonmetal element.

Which of the following are examples of binary acids?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Sulfuric acid (H_2SO_4)

undefined. C) Hydrobromic acid (HBr) ✓

undefined. D) Nitric acid (HNO_3)

Binary acids consist of hydrogen and one other nonmetal element.

Describe the general naming convention for binary acids.

Binary acids are named using the prefix 'hydro-' followed by the root of the nonmetal and the suffix '-ic' with the word 'acid' at the end.

Describe the general naming convention for binary acids.

Binary acids are named using the prefix 'hydro-' followed by the root of the nonmetal and the suffix '-ic acid'.

Describe the general naming convention for binary acids.

Binary acids are typically named using the prefix 'hydro-' followed by the root of the nonmetal and the suffix '-ic'.

List the names of the following acids:

1. A) HCl

Hydrochloric acid

2. B) H₂SO₄

Sulfuric acid

3. C) HNO₃

Nitric acid

The names of the acids are Hydrochloric acid, Sulfuric acid, and Nitric acid.

List the names of the following acids:

1. A) HCl

Hydrochloric acid

2. B) H₂SO₄

Sulfuric acid

3. C) HNO₃

Nitric acid

The names of the acids are Hydrochloric acid, Sulfuric acid, and Nitric acid.

List the names of the following acids:

1. A) HCl

Hydrochloric acid

2. B) H₂SO₄

Sulfuric acid

3. C) HNO₃

Nitric acid

The names of the acids are Hydrochloric acid, Sulfuric acid, and Nitric acid.

What is the suffix used in naming oxyacids that contain a polyatomic ion ending in "-ate"?

undefined. A) -ous

undefined. B) -ic ✓

undefined. C) -ide

undefined. D) -ate

The suffix used is '-ic'.

What is the suffix used in naming oxyacids that contain a polyatomic ion ending in "-ate"?

undefined. A) -ous

undefined. B) -ic ✓

undefined. C) -ide

undefined. D) -ate

The suffix used is '-ic'.

What is the suffix used in naming oxyacids that contain a polyatomic ion ending in "-ate"?

undefined. A) -ous

undefined. B) -ic ✓

undefined. C) -ide

undefined. D) -ate

The suffix used is '-ic'.

Part 2: Comprehension and Application

Which of the following are true about oxyacids?

undefined. A) They contain hydrogen, oxygen, and another element. ✓

undefined. B) They are named based on the polyatomic ion they contain. ✓

undefined. C) They always end with the suffix "-ous."

undefined. D) They can be named using the prefix "hydro-."

Oxyacids contain hydrogen, oxygen, and another element, and are named based on the polyatomic ion they contain.

Explain why sulfuric acid is named as such based on its chemical composition.

Sulfuric acid is named for the presence of sulfur in its composition, along with hydrogen and oxygen.

Which of the following are true about oxyacids?

undefined. A) They contain hydrogen, oxygen, and another element. ✓

undefined. B) They are named based on the polyatomic ion they contain. ✓

undefined. C) They always end with the suffix "-ous."

undefined. D) They can be named using the prefix "hydro-."

Oxyacids contain hydrogen, oxygen, and another element, and are named based on the polyatomic ion they contain.

If you have an acid with the formula H_2CO_3 , what is its name?

undefined. A) Carbonic acid ✓

undefined. B) Carbonous acid

undefined. C) Hydrocarbonic acid

undefined. D) Hydrocarbonous acid

The name of the acid H_2CO_3 is Carbonic acid.

Explain why sulfuric acid is named as such based on its chemical composition.

Sulfuric acid is named for the sulfur atom present in its composition.

If you have an acid with the formula H_2CO_3 , what is its name?

undefined. A) Carbonic acid ✓

undefined. B) Carbonous acid

undefined. C) Hydrocarbonic acid

undefined. D) Hydrocarbonous acid

The name of the acid is Carbonic acid.

Which of the following acids will conduct electricity in an aqueous solution?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH) ✓

undefined. C) Phosphoric acid (H_3PO_4) ✓

undefined. D) All of the above ✓

All of the listed acids will conduct electricity in an aqueous solution.

If you have an acid with the formula H_2CO_3 , what is its name?

undefined. A) Carbonic acid ✓

undefined. B) Carbonous acid

undefined. C) Hydrocarbonic acid

undefined. D) Hydrocarbonous acid

The name of the acid H_2CO_3 is Carbonic acid.

Which of the following acids will conduct electricity in an aqueous solution?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH) ✓

undefined. C) Phosphoric acid (H_3PO_4) ✓

undefined. D) All of the above ✓

All of the listed acids will conduct electricity in an aqueous solution.

Given the polyatomic ion phosphate (PO_4^{3-}), predict the name of the acid H_3PO_4 .

The name of the acid H_3PO_4 is Phosphoric acid.

Which of the following acids will conduct electricity in an aqueous solution?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH) ✓

undefined. C) Phosphoric acid (H_3PO_4) ✓

undefined. D) All of the above ✓

All of the listed acids will conduct electricity in an aqueous solution.

Given the polyatomic ion phosphate (PO_4^{3-}), predict the name of the acid H_3PO_4 .

The name of the acid is Phosphoric acid.

Given the polyatomic ion phosphate (PO_4^{3-}), predict the name of the acid H_3PO_4 .

The name of the acid H_3PO_4 is Phosphoric acid.

Part 3: Analysis, Evaluation, and Creation

Which of the following statements best explains the difference between binary acids and oxyacids?

undefined. A) Binary acids contain only hydrogen and oxygen.

undefined. **B) Oxyacids contain hydrogen, oxygen, and another element. ✓**

undefined. C) Binary acids are named with the suffix "-ous."

undefined. D) Oxyacids are named with the prefix "hydro-."

Oxyacids contain hydrogen, oxygen, and another element, while binary acids contain only hydrogen and one other nonmetal.

Which of the following statements best explains the difference between binary acids and oxyacids?

undefined. A) Binary acids contain only hydrogen and oxygen.

undefined. **B) Oxyacids contain hydrogen, oxygen, and another element. ✓**

undefined. C) Binary acids are named with the suffix "-ous."

undefined. D) Oxyacids are named with the prefix "hydro-."

Binary acids contain only hydrogen and one other nonmetal, while oxyacids contain hydrogen, oxygen, and another element.

Analyze the following acids and determine which are correctly named:

undefined. **A) HNO_2 as nitrous acid ✓**

undefined. **B) HClO_4 as perchloric acid ✓**

undefined. C) H_2SO_3 as sulfuric acid

undefined. **D) HBr as hydrobromic acid ✓**

The correctly named acids are HNO_2 as nitrous acid, HClO_4 as perchloric acid, and HBr as hydrobromic acid.

Which of the following statements best explains the difference between binary acids and oxyacids?

undefined. A) Binary acids contain only hydrogen and oxygen.

undefined. B) Oxyacids contain hydrogen, oxygen, and another element. ✓

undefined. C) Binary acids are named with the suffix "-ous."

undefined. D) Oxyacids are named with the prefix "hydro-."

Binary acids contain only hydrogen and one other nonmetal, while oxyacids contain hydrogen, oxygen, and another element.

Analyze the following acids and determine which are correctly named:

undefined. A) HNO_2 as nitrous acid ✓

undefined. B) HClO_4 as perchloric acid ✓

undefined. C) H_2SO_3 as sulfuric acid

undefined. D) HBr as hydrobromic acid ✓

The correctly named acids are HNO_2 as nitrous acid, HClO_4 as perchloric acid, and HBr as hydrobromic acid.

Compare and contrast the naming conventions of binary acids and oxyacids, providing examples for each.

Binary acids are named with the prefix 'hydro-' and the suffix '-ic', while oxyacids are named based on the polyatomic ion they contain.

Analyze the following acids and determine which are correctly named:

undefined. A) HNO_2 as nitrous acid ✓

undefined. B) HClO_4 as perchloric acid ✓

undefined. C) H_2SO_3 as sulfuric acid

undefined. D) HBr as hydrobromic acid ✓

The correctly named acids are HNO_2 as nitrous acid, HClO_4 as perchloric acid, and HBr as hydrobromic acid.

Compare and contrast the naming conventions of binary acids and oxyacids, providing examples for each.

Binary acids are named with the prefix 'hydro-' and the suffix '-ic', while oxyacids are named based on the polyatomic ion present.

Which of the following acids would you expect to be the strongest in terms of ionization in water?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH)

undefined. C) Phosphoric acid (H_3PO_4)

undefined. D) Sulfurous acid (H_2SO_3)

Hydrochloric acid (HCl) is expected to be the strongest acid in terms of ionization in water.

Compare and contrast the naming conventions of binary acids and oxyacids, providing examples for each.

Binary acids use the prefix 'hydro-' and the suffix '-ic', while oxyacids are named based on the polyatomic ion present.

Which of the following acids would you expect to be the strongest in terms of ionization in water?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH)

undefined. C) Phosphoric acid (H_3PO_4)

undefined. D) Sulfurous acid (H_2SO_3)

Hydrochloric acid (HCl) is expected to be the strongest acid in terms of ionization in water.

Evaluate the following statements and select those that are true regarding acid properties:

undefined. A) Acids can neutralize bases. ✓

undefined. B) Acids are slippery to the touch.

undefined. C) Acids have a pH greater than 7.

undefined. D) Acids can corrode metals. ✓

The true statements regarding acid properties are that acids can neutralize bases and can corrode metals.

Which of the following acids would you expect to be the strongest in terms of ionization in water?

undefined. A) Hydrochloric acid (HCl) ✓

undefined. B) Acetic acid (CH_3COOH)

undefined. C) Phosphoric acid (H_3PO_4)

undefined. D) Sulfurous acid (H_2SO_3)

Hydrochloric acid (HCl) is expected to be the strongest acid in terms of ionization in water.

Evaluate the following statements and select those that are true regarding acid properties:

undefined. A) Acids can neutralize bases. ✓

undefined. B) Acids are slippery to the touch.

undefined. C) Acids have a pH greater than 7.

undefined. D) Acids can corrode metals. ✓

True statements include that acids can neutralize bases and can corrode metals.

Design a real-world experiment to test the conductivity of different acids in aqueous solutions. Describe the materials, procedure, and expected outcomes.

The experiment should involve measuring the conductivity of various acid solutions using a conductivity meter.

Evaluate the following statements and select those that are true regarding acid properties:

undefined. A) Acids can neutralize bases. ✓

undefined. B) Acids are slippery to the touch.

undefined. C) Acids have a pH greater than 7.

undefined. D) Acids can corrode metals. ✓

True statements include that acids can neutralize bases and can corrode metals.

Design a real-world experiment to test the conductivity of different acids in aqueous solutions. Describe the materials, procedure, and expected outcomes.

The experiment should involve measuring the conductivity of various acid solutions using a conductivity meter.

Design a real-world experiment to test the conductivity of different acids in aqueous solutions. Describe the materials, procedure, and expected outcomes.

The experiment should involve measuring the conductivity of various acid solutions using a conductivity meter.