

(Strong and weak acids (ionisation and differences))

Q1. (2018)

This question is about acids and alkalis.

Dilute hydrochloric acid is a strong acid.

Explain why an acid can be described as both strong and dilute.

[2 marks]

Q2. a). (2021)

This question is about acids.

Hydrogen chloride and ethanoic acid both dissolve in water.

All hydrogen chloride molecules ionise in water.

Approximately 1% of ethanoic acid molecules ionise in water.

A solution is made by dissolving 1 g of hydrogen chloride in 1 dm³ of water.

Which is the correct description of this solution?

[1 mark]

Tick (✓) **one** box.

A concentrated solution of a strong acid

☐

A concentrated solution of a weak acid

☐

A dilute solution of a strong acid

☐

A dilute solution of a weak acid

☐

Q2. b). (2021)

Which solution would have the lowest pH?

[1 mark]

Tick (✓) **one** box.

0.1 mol/dm³ ethanoic acid solution

☐

0.1 mol/dm³ hydrogen chloride solution

☐

1.0 mol/dm³ ethanoic acid solution

☐

1.0 mol/dm³ hydrogen chloride solution

☐

Q3. (2023)

This question is about acids and alkalis.

Ethanoic acid is a weak acid.

What is meant by 'weak acid'?

Answer in terms of ionisation.

[1 mark]

Q4. (2024)

This question is about acids and their reactions.

Acids can be either weak or strong.

What is meant by 'a **weak** acid'?

[2 marks]
