(Fuel cells (hydrogen–oxygen fuel cell, pros and cons))

Q1. (2018)

Hydrogen fuel cells and rechargeable lithium-ion batteries can be used to power electric cars.

Complete the balanced equation for the overall reaction in a hydrogen fuel cell.

[2 marks]

Q2. (2019)

Hydrogen fuel cells can be used to power different forms of transport.

Some diesel trains are being converted to run on hydrogen fuel cells.

A newspaper article referred to the converted trains as the new 'steam trains'.

Suggest why.

[2 marks]

Q3. (2020)

The reaction between hydrogen and oxygen in a hydrogen fuel cell is used to produce electricity.

Hydrogen fuel cells and rechargeable cells are used to power some cars.

Give **two** advantages of using hydrogen fuel cells instead of using rechargeable cells to power cars.

[2 marks]

1 _____

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2 _____

_____

Q4. (2020)

Reactions occur at the positive electrode and at the negative electrode in a hydrogen fuel cell.

Write a half equation for **one** of these reactions.

[1 mark]

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Q5. (2024)

Describe how a hydrogen fuel cell produces a potential difference.

[2 marks]

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