Acids and Bases Questions













Redox Reactions

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| **QUESTION 9 (Start on a new page.)**  |  |  |

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| 9.1 | Oxidation numbers make it easier to determine whether an element or a substance is oxidised or reduced during a chemical reaction. |  |  |

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|  | 9.1.1 | Define the term *oxidation* with reference to oxidation numbers. |  | (2) |

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|  | 9.1.2 | Calculate the oxidation number of chromium in . |  | (1) |

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|  | 9.1.3 | Calculate the oxidation number of oxygen in H2O2. |  | (1) |

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| 9.2 | Consider the UNBALANCED equation below: Fe2+(aq) + Cℓ2(g) → Fe3+(aq) + Cℓ- |  |  |

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|  | 9.2.1 | Define the term *reducing agent* with reference to electron transfer*.* |  | (2) |

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|  | From the above equation, write down the: |  |  |

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|  | 9.2.2 | FORMULA of the reducing agent |  | (1) |

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|  | 9.2.3 | FORMULA of the oxidising agent |  | (1) |

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|  | 9.2.4 | Reduction half-reaction |  | (2) |

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|  | 9.2.5 | Oxidation half-reaction |  | (2) |

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|  | 9.2.6 | Balanced net redox reaction |  | (2) |
|  |  |  |  | **[14]** |