Walderslade Girls' School

Grade Descriptors for GCSE Science

To achieve a Grade 9 candidates will be able to:

- • Demonstrate relevant and comprehensive **further** knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology
- • Use and rearrange multiple step mathematical equations to perform complex scientific calculations.
- • In depth critical analysis of qualitative and quantitative data to draw detailed logical, well-evidenced conclusions which link to further knowledge and examples.
- • critically evaluate and refine methodologies, and judge the validity of scientific conclusions then providing alternative conclusions from secondary data.

To achieve a Grade 8 candidates will be able to:

- • demonstrate relevant and comprehensive knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology
- • use a range of mathematical skills to perform complex scientific calculations
- • critically analyse qualitative and quantitative data to draw logical, well-evidenced conclusions
- • critically evaluate and refine methodologies, and judge the validity of scientific conclusions

To achieve a Grade 7 candidates will be able to:

- • demonstrate broadened knowledge and understanding and apply these correctly to familiar and unfamiliar contexts using accurate scientific terminology
- • Apply and re-arrange scientific equations to perform complex multistep calculations.
- • Analyse qualitative and quantitative data to draw detailed relevant and

accurate conclusions supported by sufficient evidence

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To achieve a Grade 6 candidates will be able to:

- • demonstrate accurate and appropriate knowledge and understanding and apply these correctly to familiar and unfamiliar contexts, using accurate scientific terminology
- • use appropriate mathematical skills to perform multi-step calculations
- • analyse qualitative and quantitative data to draw relevant and accurate conclusions supported by sufficient evidence
- • evaluate methodologies to suggest detailed improvements to experimental methods, and in-depth comment on scientific conclusions

To achieve a Grade 5 candidates will be able to:

- • demonstrate mostly accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar and unfamiliar contexts, using mostly accurate scientific terminology
- • use appropriate mathematical skills to perform multi-step calculations
- • analyse qualitative and quantitative data to draw plausible conclusions supported by some evidence
- • evaluate methodologies to suggest improvements to experimental methods, and comment on scientific conclusions

• 4 To achieve a Grade 4 candidates will be able to:

- demonstrate some accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar contexts, using some accurate scientific terminology
- • use appropriate mathematical skills to perform calculations
- • analyse qualitative and quantitative data to draw simple conclusions supported by limited evidence
- • comment on methodologies to suggest improvements to experimental methods, and simple comment on scientific conclusions

To achieve a Grade 3 candidates will be able to:

- demonstrate relevant scientific knowledge and understanding using some relevant scientific terminology
- perform basic calculations with some appropriate mathematical skills
- draw conclusions from qualitative or quantitative data
- make basic comments relating to experimental methods and suggest some improvements

To achieve a Grade 2 candidates will be able to:

- demonstrate some relevant scientific knowledge and understanding using limited scientific terminology
- perform basic calculations
- draw simple conclusions from qualitative or quantitative data
- make basic comments relating to experimental methods

To achieve a Grade 1 candidates will be able to:

- demonstrate some relevant scientific knowledge
- attempt perform basic calculations
- draw simple conclusions from qualitative data
- make basic comments relating to experimental methods