



KS4 ASSESSMENT

SCIENCE

BRAMHALL HIGH SCHOOL

| Score | | Knowledge and Understanding |
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| <p style="text-align: center;">8/9</p> <p>Well above expected level for a Year 10 student</p> <p>(8 and 9 will only be awarded for exceptional performance)</p> | A/A* | <ul style="list-style-type: none"> 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 (DFE grade 8) |
| <p style="text-align: center;">7</p> <p>Well above expected level for a Year 10 student</p> | A | <ul style="list-style-type: none"> demonstrate relevant and thorough knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using usually accurate scientific terminology use a range of appropriate mathematical skills to perform challenging scientific calculations Usually critically analyse qualitative and quantitative data to draw logical, well-evidenced conclusions Usually critically evaluate and refine methodologies, and usually judge the validity of scientific conclusions |
| <p style="text-align: center;">6</p> <p>Above expected level for a Year 10 student</p> | B | <ul style="list-style-type: none"> demonstrate accurate and detailed 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 to unfamiliar situations analyse qualitative and quantitative data to draw plausible conclusions supported by evidence evaluate methodologies to improvement experimental methods, and comment on the quality of scientific conclusions |

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| <p style="text-align: center;">5</p> <p style="text-align: center;">Expected level for a Year 10 student</p> | C | <ul style="list-style-type: none"> • 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 (DFE grade 5) |
| <p style="text-align: center;">4</p> <p style="text-align: center;">Approaching the expected level for a Year 10 student</p> | D | <ul style="list-style-type: none"> • demonstrate usually appropriate knowledge and understanding and apply these often correctly to familiar and unfamiliar contexts, using usually accurate scientific terminology • use appropriate mathematical skills to mostly perform multi-step calculations • analyse qualitative and quantitative data to draw acceptable conclusions supported by some evidence • evaluate methodologies to usually suggest improvements to experimental methods, and mostly comment on scientific conclusions |
| <p style="text-align: center;">3</p> <p style="text-align: center;">Working towards the expected level for a Year 10 student</p> | E | <ul style="list-style-type: none"> • demonstrate some relevant scientific knowledge and understanding using improving scientific terminology • perform basic 1 step calculations • draw simple conclusions from qualitative and quantitative data • make comments relating to experimental methods |
| <p style="text-align: center;">2</p> | F | <ul style="list-style-type: none"> • demonstrate some relevant scientific knowledge and understanding using limited scientific terminology • perform basic calculations • draw simple conclusions from qualitative or quantitative data |

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| Working towards the expected level for a Year 10 student | | <ul style="list-style-type: none">• make basic comments relating to experimental methods• (DFE grade 2) |
| 1 Working towards the expected level for a Year 10 student | G | <ul style="list-style-type: none">• demonstrate limited relevant scientific knowledge and understanding using limited scientific terminology• perform very basic calculations• draw simple conclusions from any data• make basic comments relating to methods |

| Score | | Knowledge and Understanding |
|---|-------------|---|
| <p style="text-align: center;">8/9</p> <p style="text-align: center;">Well above expected level for a Year 11 student</p> <p style="text-align: center;">(8 and 9 will only be awarded for exceptional performance)</p> | A/A* | <ul style="list-style-type: none"> • 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 (DFE grade 8) |
| <p style="text-align: center;">7</p> <p style="text-align: center;">Well above expected level for a Year 11 student</p> | A | <ul style="list-style-type: none"> • demonstrate relevant and thorough knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using usually accurate scientific terminology • use a range of appropriate mathematical skills to perform challenging scientific calculations • Usually critically analyse qualitative and quantitative data to draw logical, well-evidenced conclusions • Usually critically evaluate and refine methodologies, and usually judge the validity of scientific conclusions |
| <p style="text-align: center;">6</p> <p style="text-align: center;">Above expected level for a Year 11 student</p> | B | <ul style="list-style-type: none"> • demonstrate accurate and detailed 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 to unfamiliar situations • analyse qualitative and quantitative data to draw plausible conclusions supported by evidence |

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| | | <ul style="list-style-type: none"> • evaluate methodologies to improvement experimental methods, and comment on the quality of scientific conclusions |
| <p style="text-align: center;">5</p> <p style="text-align: center;">Expected level for a Year 11 student</p> | C | <ul style="list-style-type: none"> • 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 (DFE grade 5) |
| <p style="text-align: center;">4</p> <p style="text-align: center;">Approaching the expected level for a Year 11 student</p> | D | <ul style="list-style-type: none"> • demonstrate usually appropriate knowledge and understanding and apply these often correctly to familiar and unfamiliar contexts, using usually accurate scientific terminology • use appropriate mathematical skills to mostly perform multi-step calculations • analyse qualitative and quantitative data to draw acceptable conclusions supported by some evidence • evaluate methodologies to usually suggest improvements to experimental methods, and mostly comment on scientific conclusions |
| <p style="text-align: center;">3</p> <p style="text-align: center;">Working towards the expected level for a Year 11 student</p> | | <ul style="list-style-type: none"> • demonstrate some relevant scientific knowledge and understanding using improving scientific terminology • perform basic 1 step calculations • draw simple conclusions from qualitative and quantitative data • make comments relating to experimental methods |

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| <p>2</p> <p>Working towards the expected level for a Year 11 student</p> | <p>F</p> | <ul style="list-style-type: none">• 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• (DFE grade 2) |
| <p>1</p> <p>Working towards the expected level for a Year 11 student</p> | <p>G</p> | <ul style="list-style-type: none">• demonstrate limited relevant scientific knowledge and understanding using limited scientific terminology• perform very basic calculations• draw simple conclusions from any data• make basic comments relating to methods |