

# ACTIVITY 5 – command words (m/s)

## Biology

| Question Number | Answer   | Additional guidance | Mark     |
|-----------------|--|---------------------|----------|
| <b>8(b)</b>     | <p>An answer that makes reference to four of the following points:</p> <ul style="list-style-type: none"> <li>reference to diaphragm (1)</li> <li>balloons represent lungs (1)</li> <li>reference to trachea / windpipe / bronchus (1)</li> <li>reference to ribs / ribcage / movement of chest / ribcage / bell jar does not move (1)</li> <li>reference to <u>intercostal</u> muscles (1)</li> </ul> |                     | <b>4</b> |

## Chemistry

|   |   |  |   |
|---|---|--|---|
| b | <ul style="list-style-type: none"> <li>calculation of temperature change</li> <li>substitution into <math>Q = mc\Delta T</math></li> <li>evaluation</li> </ul> <p>Example calculation</p> <p><b>M1</b> <math>14.2 - 20.0 = (-)5.8</math></p> <p><b>M2</b> <math>Q = 100 \times 4.18 \times (-)5.8</math></p> <p><b>M3</b> <math>= (-) 2420 \text{ (J)}</math></p> | <p><math>100 \times 4.18 \times (20 - 14.2)</math><br/>scores <b>M1</b> and <b>M2</b></p> <p><b>ACCEPT</b> any number of sig figs greater than 2</p> | 3 |
|---|---|--|---|

## Physics

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| (b) | <p>max. two factors linked to thinking distance:</p> <p>MP1. tiredness (of driver);<br/>MP2. age (of driver);<br/>MP3. alcohol or drug consumption;<br/>MP4. distraction (of driver);</p> <p>max. two factors linked to braking distance:<br/>MP5. mass / weight of car;</p> <p>MP6. condition of brakes;<br/>MP7. condition of road;<br/>MP8. condition of tyres;<br/>MP9. slope of road;</p> | <p>allow 'reaction time' if no other thinking distance mark achieved<br/>ignore factors affecting visibility</p> <p>e.g. caffeine, medicine etc.<br/>e.g. using a mobile phone etc.</p> <p>ignore bald "the weather"<br/>allow however expressed e.g. more people, less luggage etc.</p> <p>e.g. icy road, wet road<br/>e.g. how much grip left / eq<br/>e.g. whether the car is going up or downhill</p> | 4 |
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