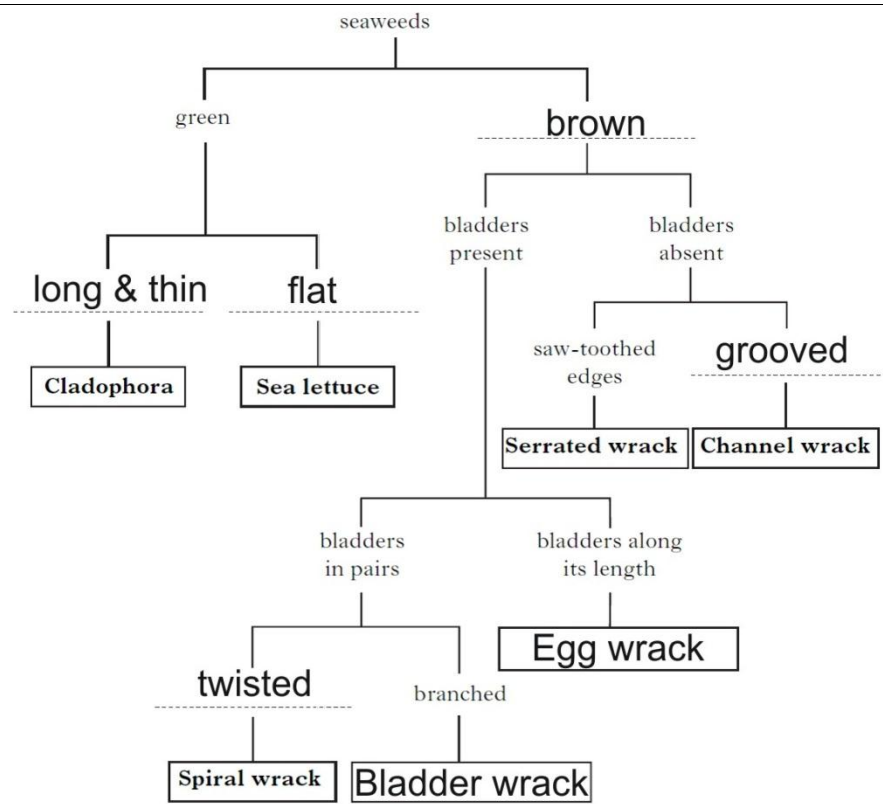


### Assessment Schedule 9C 2010

/ means OR eg. green / blue – answer needs green OR blue  
 ( ) means additional, not really required eg. Gauze (mat) – gauze would be sufficient  
 : means AND eg. red : hot - answer needs red and hot.

| Question | Evidence  | Marks                           |
|----------|---|---------------------------------|
| One (a)  | Any 2 of<br>(image of puppy) is same distance behind mirror as in front<br>(image of puppy) is laterally inverted / back to front<br>(image of puppy) of upright / right way up<br>(image of puppy) is same distance behind mirror as in front<br>(image of puppy) is virtual   | 1 mark<br>each = <b>2 marks</b> |
| (b)      | <ul style="list-style-type: none"> <li>• Correctly <u>ruled</u> lines</li> <li>• Lines dotted behind mirror</li> <li>• Correct arrows on rays</li> </ul> 1 correct = 1 mark, 2-3 correct = 2 marks  | <b>2 marks</b>                  |
| (c)      | reflected light off the moon or equivalent (Must NOT imply moon is a light source)  | <b>1 mark</b>                   |
| (d)      | <b>Either</b> smaller <b>or</b> a suitable diagram  | <b>1 mark</b>                   |
| (e)      | Any 2 correctly labeled; each extra that are wrong cancel out a correct answer. One right & one wrong = 0 marks <ul style="list-style-type: none"> <li>• pinna/outer ear</li> <li>• ear drum</li> <li>• 3 small bones / ossicles / hammer, anvil and stirrup (any order!)</li> <li>• semi-circular canals</li> <li>• auditory nerve</li> <li>• cochlea</li> </ul> | <b>1 mark</b>                   |
| (f)      | Can (better) judge direction sounds are coming from<br>OR can hear sounds from both sides / all directions<br>BUT NOT “can hear better”   | <b>1 mark</b>                   |
| Two (a)  | Most common – clover ..... Least common – violet<br>(NOT accepting pictures!!)  | <b>1 mark</b>                   |
| (b)      | Table with columns/rows titled for A, B and C” & with rows/columns of plant types – EITHER A, B AND C must be labeled as “area” OR flowers labeled as “flower type/plant types”(1 mark)<br>Data entered correctly for Area A (1 mark) (Ignore data for B and C)   | <b>2 marks</b>                  |
| (c)      | Bar graph is circled <b>PLUS</b> valid reason eg. Data is discrete / non-continuous / you can’t have “half flowers” etc NOT – it is quicker / easier to draw/understand / bar graphs are just for time, distance etc  | <b>1 mark</b>                   |
| (d)      | Since the keywords are given look for 3 good correct statements with linked ideas eg. <ul style="list-style-type: none"> <li>• Photosynthesis takes place in the chloroplasts which are found in leaves</li> </ul>  | <b>3 marks</b>                  |

|           |   |  |  |  |                                |
|-----------|---|--|--|--|--------------------------------|
|           | <ul style="list-style-type: none"> <li>Plants turn water and carbon dioxide into glucose (food)</li> <li>Plants take in water through their roots and carbon dioxide through their leaves</li> <li>Plants use energy from the sun to make glucose/starch in their leaves by photosynthesis etc</li> </ul> <p>Look for evidence also on a suitable labeled / annotated diagram</p> <p>If 3 very simple but correct statements, award 1 mark.<br/>If large number of simply stated facts but no linkage of ideas or a minor error, award 2 marks.</p> |  |  |  |                                |
| Three (a) | slimy scales  | gills  | fins   | streamlined shape                            |                                |
|           | slime on scales acts as defense against bacterial/parasitic/fungal pathogens (functional)<br><br>scales protect the fish (structural)   | Gas exchange / allow fish to get oxygen/breathe in water | to help move / propel the fish through water BUT NOT to help it swim (I can swim and I don't have fins) OR for stability | Allows fish to move easily through the water | <b>1 mark</b>                  |
|           | Any suitable answer – marker to supply further examples   |  |  |  |                                |
|           | functional / structural depending on above  | structural   | structural   | structural                                   | <b>1 mark</b>                  |
| (b)       | Camouflage it / help it hide in the reeds OR mimic a poisonous fish AND Reason why (linked to survival) – eg to avoid being eaten (by....)  |  |  |  | <b>1 mark</b><br><b>1 mark</b> |

|          |  |  |
|----------|--|--|
| (c)      |  <pre> graph TD     seaweeds --&gt; green     seaweeds --&gt; brown     green --&gt; long_thin[long &amp; thin]     green --&gt; flat     long_thin --&gt; Cladophora     flat --&gt; Sea_lettuce[Sea lettuce]     brown --&gt; bladders_present[bladders present]     brown --&gt; bladders_absent[bladders absent]     bladders_present --&gt; bladders_in_pairs[bladders in pairs]     bladders_present --&gt; bladders_along_length[bladders along its length]     bladders_in_pairs --&gt; twisted     bladders_in_pairs --&gt; branched     twisted --&gt; Spiral_wrack[Spiral wrack]     branched --&gt; Bladder_wrack[Bladder wrack]     bladders_along_length --&gt; Egg_wrack[Egg wrack]     bladders_absent --&gt; saw_toothed[saw-toothed edges]     bladders_absent --&gt; grooved     saw_toothed --&gt; Serrated_wrack[Serrated wrack]     grooved --&gt; Channel_wrack[Channel wrack] </pre> | <p>5-7 answers correct = <b>2 marks</b></p> <p>3-4 answers correct = <b>1 mark</b></p> |
| Four (a) | <ul style="list-style-type: none"> <li>• The greater the number of turns / more turns, the greater/further the distance travelled</li> <li>• The thicker the rubber band, the greater/further the distance travelled (for any number of turns)</li> </ul>  | 1 mark each = <b>2 marks</b>   |
| (b)      | Repeat each test / repeat tests : average results  | <b>1 mark</b>  |
| (c)      | <p>Any 2 correct statements e.g.</p> <ul style="list-style-type: none"> <li>• More energy is produced in January than [named month(s)]</li> <li>• Most energy is produced in January</li> <li>• For all 3 months the pattern/trend is the same</li> <li>• More energy is produced at 40° (tilt) angle than [named angle(s)]</li> <li>• Most energy is produced when the (tilt) angle is 40°</li> <li>• The least energy is produced in July</li> </ul>   | 1 mark each = <b>2 marks</b>   |
| (d)      | 22.5 units (accept 22 or 23 to allow for rounding): to 30 units at 40° and 25 units at 50° so half way between will be 22.5 or 22 ½ units. Do not need to say all January go up 5 units for each 10° decrease in angle – but may!  | <b>1 mark</b>  |

|          |   |  |
|----------|---|--|
| Five (a) | 1 = C, 2 = A, 3 = B, 4 = D – all need to be correct   | <b>1 mark</b>  |
| (b)      | Strength – support heavy loads<br>Wear resistance – resist damage by rubbing<br>Elasticity – able to stretch and return...<br>Hardness – able to resist damage caused by impact<br>Flammability – ability to burn<br>Flexibility – ability to bend  | 5-6<br>correct =<br>2 mark<br>3-4<br>correct =<br><b>1 marks</b> |
| (c)      | It is flammable AND toxic/poison (both identified)<br>OR it is flammable : so it could catch fire/burn (what & why)<br>OR it is toxic : so it could poison someone (what & why)   | <b>1 mark</b>  |
| (d)(i)   | All 3 lines correct   | <b>1 mark</b>  |
| (d)(ii)  | Evaporation = P; melting = R (both correct)   | <b>1 mark</b>  |
| (e)      | It is a liquid : because it has already melted but has not yet boiled   | <b>1 mark</b>  |
| Six (a)  | Experiment is described that <ul style="list-style-type: none"> <li>• has food that is both hidden (eg behind a screen) and visible (or experiment conducted in dark box)</li> <li>• has a number of slugs + a reason why</li> <li>• has repeat trials</li> </ul> (They are NOT allowed to cut the eye stalks off and see if the slugs can still find the food using sense of smell!!!) | <b>3 marks</b>   |
|          | Diagram is drawn which.... <ul style="list-style-type: none"> <li>• describes their experiment (can take food hidden/visible from this) &amp; is labeled (with 3 or more labels)</li> </ul>   | <b>1 mark</b>  |
| (b)      | Animal is circled (no mark)<br>Any abiotic factor: e.g. light levels, dampness, ground surface etc  | <b>1 mark</b>  |
|          | Response: any suitable response e.g. snails prefer/choose damp, woodlice preferred dark etc. May have to guess if its “size of stones/bark” – as pupils did their own experiments <b>Must be a response of the animal not a consequence (e.g. “putting salt on a snail makes it die”)</b>   | <b>1 mark</b>  |