

Question	Marking Guidance	Mark	Comments
05.1	Hydrolysis (reaction);	1	
05.2	<ol style="list-style-type: none"> <li>1. (Phosphate required) to make RNA;</li> <li>2. (Phosphate required) to make DNA;</li> <li>3. (Phosphate required) to make ATP/ADP;</li> <li>4. (Phosphate required) to make membranes;</li> <li>5. (Phosphates required) for phosphorylation;</li> </ol>	2 max	<p>1 and 2. If neither DNA or RNA are named allow one mark for nucleotide/nucleic acid/phosphodiester bonds/sugar-phosphate backbone.</p> <p>4. Ignore: phospholipids without reference to membranes.</p> <p>Accept: as additional mark points any named biological molecule containing phosphate e.g. NADP, AMP, RuBP.</p>
05.3	Accept answer in range from 3.7 : 1 to 4.1 : 1;	1	Reject any ratio not : 1.
05.4	<ol style="list-style-type: none"> <li>1. Seeds/embryo remain dormant/inactive in winter/cold <b>OR</b> Growth/development of seed/embryo during winter/cold;</li> <li>2. Seeds/plants develop in spring/summer <b>OR</b> Seeds/plants develop when temperature/light increases;</li> <li>3. Plant photosynthesise (in spring/when warm);</li> <li>4. Produce (more) seeds/offspring in spring/growing season;</li> </ol>	3 max	<p>1. Ignore: hibernate.</p> <p>1. Accept: 'seed survives winter/cold'.</p> <p>1. Reject: plant develops or seed germinates during winter/cold.</p> <p>2. Accept: seeds/plants develop when more light or when temperature is higher.</p> <p>2. Accept: seed germinates/'sprouts' during spring/summer or when temp/light increases.</p>