<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>Extra information</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.1</td>
<td>solids</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
| 01.2     | Any one from:  
- chlorine  
- ozone |                   | 1    |
| 01.3     | contains dissolved solids or chemicals such as chlorine or contains dissolved oxygen |                   | 1    |
| 01.4     | distillation / simple distillation | do not accept fractional distillation | 1    |
| 01.5     | evaporation | allow boiling | 1    |
| 01.6     | condensing |                   | 1    |
| 01.7     | Any one from:  
- distillation is slow  
- distillation is extremely expensive or distillation requires a lot of fuel |                   | 1    |
| 01.8     | leave to evaporate or leave in a dish for several days  
there should be no solid left once all the water has evaporated | allow any method of evaporation | 2    |
### GCSE Chemistry only

<table>
<thead>
<tr>
<th>Question</th>
<th>Extra information</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Marks awarded for this answer will be determined by the Quality of Communication (QC) as well as the standard of the scientific response.</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level 1 (1–2 marks)</th>
<th>Level 2 (3–4 marks)</th>
<th>Level 3 (5–6 marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 marks</td>
<td>The candidate has stated advantages or disadvantages of each type of polymer from the table.</td>
<td>The candidate has stated advantages and disadvantages of each type of polymer from the table.</td>
<td>The candidate has stated advantages and disadvantages from the table and added their own knowledge.</td>
</tr>
</tbody>
</table>

### Examples of points that could be included in the answer:

#### Advantages of bags made from corn starch

- Corn starch is made from plants which can be regrown or replanted therefore are renewable.
- The energy requirement for making bags from corn starch is lower.
- The carbon footprint for bags from corn starch is lower or making bags from corn starch releases less CO₂ into the atmosphere.
- Plants will take CO₂ out of the atmosphere as they photosynthesise or grow.
- Bags made from corn starch are biodegradable so will decompose in landfill sites so there is less of a problem with landfill sites filling up.
- Bags made from corn starch are compostable so don’t have to be put in landfill sites.
- Bags made from corn starch cause less of a problem with litter.

#### Disadvantages of bags made from corn starch

- The manufacturing process takes longer.
- The bags may degrade too quickly or can be used fewer times before they degrade.

#### Advantages of bags made from poly(ethene)

- The bags can be manufactured more quickly.
- The bags can be used more times before they degrade.
- The bags can be disposed of by burning which produces energy.
Disadvantages of bags made from poly(ethene)

Poly(ethene) is made from crude oil which is a finite resource.
The energy requirement for making poly(ethene) is higher.
The carbon footprint for bags from poly(ethene) is higher or making bags from poly(ethene) releases more CO₂ into the atmosphere.
Bags made from poly(ethene) are non-biodegradable therefore will not decompose in landfill sites so space in landfill sites is a problem.
Bags made from poly(ethene) cause more of a problem with litter.
The bags will produce CO₂ when they are burnt.