Part D

Chapter 3
Assessment Tasks – Section 2
Look at the information about Mosquitoes and answer Questions 9, 10, 11 and 12.

MOSQUITOES

Life Cycle of a Mosquito

Q9 The life cycle diagram is shown in a circle. What does this tell you?

Year 6 students collected mosquito larvae from a pond near the school.  
- The larvae were divided into four separate groups.
- Each group was placed in a large jar containing water from the pond.
- A thermometer to measure temperature was placed in each jar.
- Small heaters were used to control the temperature in each jar.

10°C Jar 1  
16°C Jar 2  
22°C Jar 3  
28°C Jar 4
The larvae were examined each day for nine days. Each day three larvae were taken from each jar and their length measured (in millimetres).

<table>
<thead>
<tr>
<th>Jar</th>
<th>Temperature</th>
<th>Average length of larvae (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Day 1</td>
</tr>
<tr>
<td>1</td>
<td>10°C</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>16°C</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>22°C</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>28°C</td>
<td>4</td>
</tr>
</tbody>
</table>

**Q10** Look at the pattern in the data. As the temperature went up what happened to the growth of the larvae?

**Q11** Compare the results for Jar 1 with the other jars. Give one reason why the time taken for the pupae to form is different.

**Q12** Look at the table. What two things must occur before a larva can change into a pupa?
Read Paper Clips and answer Questions 13 and 14.

PAPER CLIPS

Jill and Tracey wanted to make a mobile. They decided to use paper clips to make chains from which to hang decorations. The mobile would look something like this.

Each chain was made of 5 paper clips.

Jill and Tracey had been given four types of paper clip. Each paper clip type was made of a different metal.
Jill and Tracey designed an experiment to test the strength of the paper clips. They hung a bag of marbles from each clip.
More marbles were added until the clip bent and the bag dropped.
They did the test three times for each type of paper clip. The results are shown in the table on the next page.
Q13 Which paper clip type was the strongest?

- Holdall
- Clipon
- Plastico
- Slippet

Q14 Jill and Tracey carried out the experiment three times for each type of paper clip.

Why did they do that?