The Body’s Defences Worksheet
This worksheet accompanies slide 5 of The Body’s Defences.ppt

Student task
The aim of this activity is to simulate the spread of infection through a population of people. Once you have completed the activity, record the results of your experiment below

Size of population = ………………………………………………………………………………………………………………………………………
Number infected at the start = ……………………………………………………………………………………………………………………………
Number infected at the end = ……………………………………………………………………………………………………………………………

The table shows the results of a similar experiment carried out in a group of 100 students.

<table>
<thead>
<tr>
<th></th>
<th>Start</th>
<th>One handshake</th>
<th>Two handshakes</th>
<th>Three handshakes</th>
<th>Four handshakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students infected</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

1. Plot these results on the graph paper below.
2. What can you conclude from these results?

3. How many people would you expect to be infected after five handshakes?

4. What are the differences between this simulation and the spread of an actual disease in a population?