Parts of the High School Gateway in Science
Every HS Gateway Assessment includes the following components: Scenario, Writing Task Choices, and Documents.

**Scenario**
The scenario communicates the setting or situation in which you are being placed. It gives you information about the type of problem that requires your response. It also provides you some necessary background information that should be referenced in your essay response.

**Writing Task Choices**
You are always given two writing tasks from which to choose. You only have to choose one. Once you have chosen your writing task you should look for the following:

1.) Specific instructions on the topic you are to write; and
2.) Bulleted statements or questions that indicate the information you need to address in your response.

**Documents**
Documents are included with your writing assessment. It is possible that some of the documents do not apply to the writing task you chose. You should review the documents that go with the writing task you chose and refer to them when you write your essay. For example, use the notation (Document A) when you mention it in your written response.

**Sample**
See the following sample prompt and sample student responses. An example of a low scoring paper, a minimal scoring paper, and a high scoring paper are provided. In addition, an explanation of the scoring is provided.
INFECTIOUS DISEASES

Scenario
You are a researcher at the Centers for Disease Control (CDC). Your main area of study is bacteria and viruses that have become resistant to medications. There has been an outbreak of an infectious disease at a local hospital for which antibiotics have had no effect. You have been asked to inform employees about important characteristics of these common disease causing pathogens.

Respond to ONE of the following essay topics.

Writing Task Choice #1:
Write an essay in which you explain factors that contribute to the spread of bacterial infection.

In your essay be sure to do the following:
- Identify the factors that are necessary for the growth of bacteria.
- Describe how bacteria may become resistant to antibiotics.
- Identify the pattern of infection in the hospital and explain factors that may have contributed to the spread of infection.

Documents A and B are related to this Writing Task.

OR

Writing Task Choice #2:
Write an essay in which you explain the difference between viral and bacterial infections.

In your essay be sure to do the following:
- Describe the basic characteristics of bacteria and viruses.
- Describe how bacteria reproduce and viruses replicate.
- Explain why antibiotics had no effect on the infectious disease outbreak at the local hospital.

Documents C and D are related to this Writing Task.
**DOCUMENT A**

Hospital Directory with Percent of Infected Employees by Floor

<table>
<thead>
<tr>
<th>DIRECTORY</th>
<th>PERCENT (%) OF INFECTED EMPLOYEES ON EACH FLOOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST FLOOR</td>
<td></td>
</tr>
<tr>
<td>Admissions/Waiting Room</td>
<td>75 % of employees infected</td>
</tr>
<tr>
<td>Cafeteria</td>
<td></td>
</tr>
<tr>
<td>Public Restroom</td>
<td></td>
</tr>
<tr>
<td>Emergency Room</td>
<td></td>
</tr>
<tr>
<td>SECOND FLOOR</td>
<td></td>
</tr>
<tr>
<td>Medical Imaging Rooms</td>
<td>31 % of employees infected</td>
</tr>
<tr>
<td>Delivery Ward/Nursery</td>
<td></td>
</tr>
<tr>
<td>THIRD FLOOR</td>
<td></td>
</tr>
<tr>
<td>Operating Rooms</td>
<td>8 % of employees infected</td>
</tr>
<tr>
<td>Recovery Rooms</td>
<td></td>
</tr>
</tbody>
</table>

**DOCUMENT B**

Press Release from a Hospital Spokesperson

"We have recently experienced an outbreak of an infectious disease. We are doing our best to contain the outbreak; however, the antibiotics that are normally prescribed to treat this type of infection are no longer working. As we know, all organisms, including bacteria, can change over time. Our goal now is to find an effective treatment for this pathogen."

March 2008
Reproduction of Bacteria
Replication of Viruses