**Review Worksheet: Antibiotics and Antivirals**

**Name: ……………………………………………………………..**

*Do these questions, using your learning resources. Look at the “marks” to give you an idea of the level of detail required in the response (formative only – does not count towards your grade). At the end, mark your work, correct it, and fill in the reflection section. Questions marked \* require you to use reasoning, inferring and application of knowledge, or perhaps extra research to get the answer. It won’t be right there in the text.*

1: What are antibiotics?

(2 marks)

*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*

2: How do bacteriocidal antibiotics work?

(4 marks)

*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*

3: How do bacteriostatic antibiotics work?

(3 marks)

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*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*

4: Amir gets a bacterial wound infection. It doesn’t respond to the usual antibiotics. Amir’s doctors decide to do a culture and sensitivity test on a sample from Amir’s wound. Explain how a culture and sensitivity test works and describe how Amir’s doctor will be able to tell which antibiotics may be effective for Amir’s wound infection.

(5 marks)

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5: Why is antibiotic resistance a problem in human health?

(3 marks)

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*…………………………………………………………………………………………………………………*

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6: What factors can contribute to antibiotic resistance?

(3 marks)

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7: What type of pathogen do antivirals treat?

(1 mark)

*…………………………………………………………………………………………………………………*

8: How do antiviral medications work?

(2 marks)

*…………………………………………………………………………………………………………………*

*…………………………………………………………………………………………………………………*



9: Fill in the following table showing what is happening to membrane channels, ion movement and the membrane potential at each stage of an AP.

(14 marks)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Membrane channel activity** | **Ion movement** | **Membrane potential** |
| **Resting Membrane Potential (RMP)** |  |  |  |
| **Depolarisation** |  |  |  |
| **Repolarisation** |  |  |  |
| **Hyperpolarisation** |  |  |  |
| **Return to RMP** |  |  |  |

Go back and mark your work using the marking key provided. What score did you get? /37

*I included enough detail in my answers.*



*I was able to find information in the text/powerpoint presentation.*

*I was able to reason and infer where the information wasn’t directly in the text (questions with \*).*

*I marked my work and wrote down any answers where I missed marks.*