**Review Worksheet: Types of Immunity**

**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: Explain what is meant by the term “active immunity” and outline how the process of active immunity occurs in the body.

(4 marks)

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2: Explain what is meant by the term “passive immunity” and describe how this occurs.

(5 marks)

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3: Explain the difference between Natural and Artificial Immunity.

(3 marks)

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4: For each of the following, circle two options to show what type of immunity is being described.

(6 marks)

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| Rebecca sneezes on Jenna and Jenna gets infected with the measles virus. Jenna’s APC encounter the measles virus and present the measles antigen to the lymphocytes, which go through the process of antibody-mediated and cell-mediated immunity to eliminate the measles virus. | Active  Passive  Artificial  Natural |
| Years later, Jenna gets infected with measles again. Memory cells produced the first time she got infected respond quickly and proliferate to produce antibody and killer T-cells. The virus is eliminated before symptoms develop. | Active  Passive  Artificial  Natural |
| Ms Byrne gets bitten by a bat which is thought to be carrying a rabies-like virus. She goes to the hospital and receives an infusion of rabies antibody. It binds to the rabies virus and eliminates it. | Active  Passive  Artificial  Natural |
| Doug gets his tetanus toxoid vaccine at the medical practice. It contains a modified version of the tetanus toxin that can’t damage cells but still has the antigenic site present. Doug’s APC phagocytose the toxoid, and present the antigen to the lymphocytes, which trigger antibody-mediated and cell-mediated immunity to destroy the toxoid, and produce memory cells so that the process can occur more quickly in future. | Active  Passive  Artificial  Natural |
| Darren has never been vaccinated against tetanus. He steps on a rusty nail and starts to develop neurological symptoms as a result of the tetanus toxin. He goes to hospital and is given an infusion of tetanus antitoxin, containing antibodies for the toxin, which bind and eliminate it. | Active  Passive  Artificial  Natural |
| Sarah is immune to measles. Measles antibody travels via her breastmilk to her baby. The baby is exposed to measles virus and the antibody from the breastmilk neutralises the virus before it can make the baby sick. | Active  Passive  Artificial  Natural |

5: Someone is bitten by a snake, receives antivenom, and recovers in hospital. Explain why they aren’t protected from further bites by the same type of snake:

(4 marks)

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6: List and describe the functions of the cerebrospinal fluid

(4 marks)

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Go back and mark your work using the marking key provided. What score did you get? /26

*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.*