**Overview of the Immune System—Online Activity**

***Go to*** [***www.nobelprize.org***](http://www.nobelprize.org)***. Click on the “Educational” tab. Scroll down the page and click on “Immune Responses—Have a look”. There is an interactive game on IMMUNE RESPONSES (***[***http://www.nobelprize.org/educational/medicine/immuneresponses/***](http://www.nobelprize.org/educational/medicine/immuneresponses/)***). Click on PLAY.***

Start reading the descriptions and interact with the game characters as you advance through the game.

***Click on 02 on the right hand side***. After completing your task, ***click on Read More*** on the lower left hand side. Answer the following questions.

1. What is a vaccine?

2. How does serum therapy differ from most vaccines?

***Click on 03.***

3. What is an antibody?

4. Where are they made?

5. What do antibodies do?

***Click on 08.***

6. Describe the structure of an antibody.

7. Describe the function of antibodies. Does the way it works remind you of anything else?

8. What is an antigen?

9. How are pathogens neutralized?

***Click on 09.***

10. What are T killer cells (lymphocytes) and what do they do?

***Go back to the Immune Responses page. In the left-hand column, find Immune System and click on it. From there, click on the Immune System--in More Detail. Fill in the tables below.***

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**IMMUNE SYSTEM: KEY PLAYERS**

|  |  |  |
| --- | --- | --- |
| **PROTEINS** | | |
|  | **COMPLEMENT SYSTEM** | **ANTIBODIES** |
|
| **LOCATION** |  |  |
| **FUNCTION** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **CELLS** | **PHAGOCYTES** | **LYMPHOCYTES** | |
| **T CELLS** | **B CELLS** |
| **DEFINITION** |  |  |  |
| **TYPES OF CELLS AND FUNCTIONS** | **GRANULOCYTES**  **MACROPHAGES**  **DENDRITIC CELLS** | **HELPER T CELLS**  **CYTOTOXIC (KILLER) T CELLS** | **PLASMA CELLS**  **MEMORY CELLS** |