

The immune system comic strip design!

Use one (or more) 11 x 17 piece of paper and design a comic strip to detail and explain the functions of the immune system. Please use mainly images in your explanation! Words should only be used to label cells, and other important concepts. Short sentences should only be used to explain very large ideas, such as “B-cells create antibodies”. (Want to use a digital format? Please talk to me!) Your comic strip needs to be a minimum of 8 frames and include your name and all the following parts of the immune system:

- The first lines of defence: outside the body, inside the body
- Second and third lines of defence: the innate and acquired immune responses
 - Innate:
 - Inflammation (explain what this is)
 - White blood cells arrive on the scene (what are they called? Phagocytes)
 - Acquired immune response
 - Foreign antigen recognition by white blood cell
 - T-cells (helper and killer)
 - B-cells (make antibodies) and memory B-cells
 - Vaccinations (separate concept but very similar to the information listed above)
 - How vaccinations create memory B-cells and provide us with immunity to a specific pathogen

Rubric:

	Communicating your understanding of the immune system response to infection.	Visual appeal and ability to explain your understanding with images
EXT	You have gone above and beyond what was expected. All immune system components are included, possibly with extra information. Your cartoon is original, well thought out and clearly demonstrates your understanding.	Excellent graphics that explain the immune system mainly with graphics. Words add important details not easily communicated with graphics. Colour compliments the final project.
PRF	You have done what was expected, not more or less. All immune system points are included and you are demonstrating an understanding of this topic.	Images are clear and easy to follow. Most concepts are explained with graphics, except for headings and titles. Minor errors are acceptable as the focus is on explanation of ideas.
DEV	You have some good ideas, but are missing one or two points, or have some small errors that indicate an incomplete understanding.	Images convey the main idea, but some areas are unclear. Too many or too few words are used so meaning is hard to interpret.
EMG	You are missing some big ideas and have not managed to show that you understand the material.	Work is messy, hard to follow. Graphics do not flow logically. No words, or too many words replace your images.

NOTE: Do not copy work found online – this is called plagiarism and is not acceptable in schools. Also, do not copy someone else's work, or allow others to copy yours! All of these will result in a mark of zero for this project.

Suggested way to proceed with this assignment:

- Start with a quick sketch of all the first lines of defence. Then, continue with a cut or injury of some kind that is infected with a pathogen.
- This is followed by the Innate response (what cells are needed, what events occur?)
- This is followed by the acquired immune response (what happens? In what order?)
- One final slide (or two or more) can separately show how vaccinations work (or you can somehow incorporate vaccinations into your cartoon? The choice is yours.)
- Then you need to include the following words/concepts in some way:
 - First line of defence
 - Inflammation
 - White blood cells
 - Pathogens
 - Antigen
 - B cells
 - antibodies,
 - T cells.
 - Killer T
 - Helper T cell
 - Memory B cells
 - Vaccinations (and how they provide immunity)