

1. Copy and complete the following:

Pathogens are _____ that cause disease. Human diseases are caused by bacteria _____ and _____. The airways have cells that make to trap any pathogens that enter the body when people _____. The stomach lining makes _____ which kills pathogens in the _____. Dead cells on the surface of _____ form a barrier to pathogens.

White blood cells form a second form of protection from pathogens. White blood cells have 3 methods of destroying _____. The first way white blood cells can destroy pathogens is consuming them. This process is called _____. This is when the white blood cells membrane changes shape and _____ the pathogen. Once the pathogen is inside it uses enzymes to _____ it.

The second way white blood cells can protect you against pathogens is by producing _____ to neutralise _____. When pathogens start to produce toxins inside your body it makes you feel _____.

The third way white blood cells destroy pathogens is by producing _____. These antibodies attach on to the microbes _____. Once attached this stops the pathogen from carrying out its job and kills it. Only _____ antibodies can attach to a certain pathogen this is because the shape of the antibody has to be _____ to the antigen. Antibodies also act as glue and can stick many pathogens together so other white blood cells can _____ them.

Once white blood cells produce an antibody that works for a particular pathogen it tries to _____ for the future. If you become sick with the same pathogen again your white blood cells already know what _____ works and can produce it _____ to kill the pathogen. This is when you are _____ to that disease.