

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.