

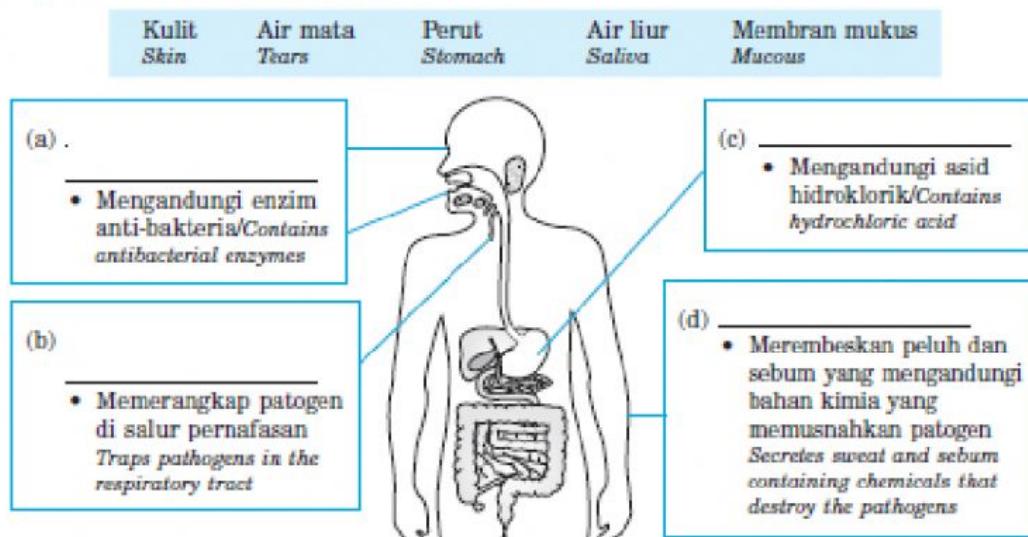
Lengkapkan ruang dengan perkataan yang sesuai tentang tiga barisan pertahanan badan.
 Complete the space with suitable words about the three lines of body defence. **TIP**

A. Mekanisme pertahanan tidak spesifik/Non-specific defence mechanism

1 Barisan pertahanan pertama/First line of defence

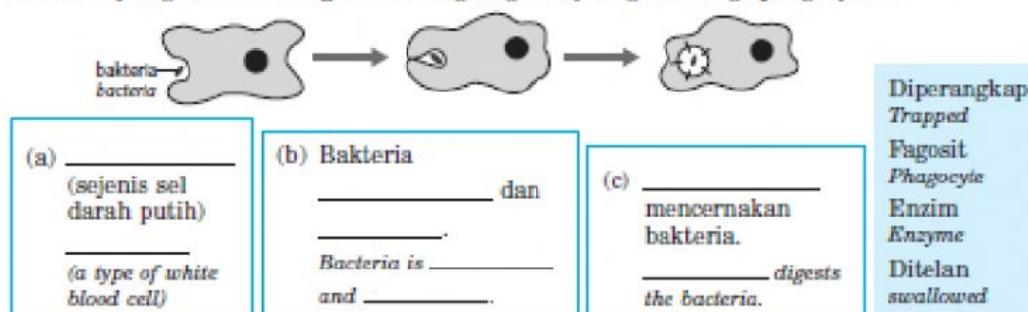
Menghalang patogen daripada memasuki badan.

To prevent the pathogens from entering into the body



2 Barisan pertahanan kedua/Second line of defence

Melawan patogen melalui fagositosis/Fight against pathogens through phagocytosis.

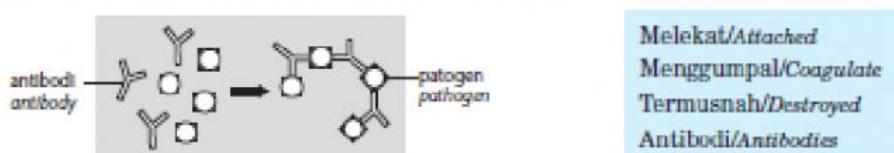


B. Mekanisme pertahanan spesifik/Specific defence mechanism

3 Barisan pertahanan ketiga/Third line of defence

Melawan patogen melalui penghasilan antibodi.

Fight against pathogens through the production of antibodies.



(a) _____ yang dihasilkan oleh sel darah putih _____ pada patogen.

The _____ produced by white blood cells are _____ to pathogens.

(b) _____ menyebabkan patogen _____ dan _____.

cause pathogens to _____ and are _____.

- 1 Nyatakan maksud bagi istilah yang berikut./State the meanings of the following terms. **TP2**

Imunisasi <i>Immunisation</i>	Vaksin <i>Vaccine</i>	Antiserum <i>Antiserum</i>	Antigen <i>Antigen</i>	Pemvaksinan <i>Vaccination</i>	Keimunan <i>Immunity</i>
(a)	Bahan yang mengandungi patogen yang dilemahkan atau dimatikan <i>A substance which contains weakened or dead pathogens</i>				
(b)	Bahan asing seperti patogen yang terdapat dalam darah <i>A foreign substance such as a pathogen that is found in the blood</i>				
(c)	Sejenis protein yang dihasilkan oleh badan untuk melawan antigen <i>A type of protein produced by the body to fight antigens</i>				
(d)	Tindakan suntikan vaksin <i>Action of injecting a vaccine</i>				
(e)	Bahan yang mengandungi antibodi untuk mencegah penyakit <i>A substance which contains the antibodies to prevent diseases</i>				
(f)	Prosedur perubatan yang membolehkan badan membina keimunan melawan sesuatu penyakit <i>A medical procedure that allows the body to build immunity against a disease</i>				
(g)	Keupayaan sistem badan untuk melawan suatu patogen <i>The ability of the body system to fight against pathogens</i>				

- 2 Berdasarkan maklumat yang diberi, isi tempat kosong tentang jenis-jenis keimunan.
Based on the given information, fill in the blanks about the types of immunity. **TP2**

Aktif buatan <i>Artificial active</i>	Pasif semula jadi <i>Natural passive</i>	Aktif semula jadi <i>Natural active</i>	Pasif buatan <i>Artificial passive</i>	Vaksin <i>Vaccine</i>
Demam campak <i>Measles</i>	Tetanus <i>Tetanus</i>	Rabies <i>Rabies</i>	Tuberkulosis <i>Tuberculosis</i>	Antiserum <i>Antiserum</i>

Jenis keimunan/ <i>Types of immunity</i>			
Keimunan aktif <i>Active immunity</i>		Keimunan pasif <i>Passive immunity</i>	
Diperoleh apabila seseorang sembuh daripada penyakit tertentu seperti _____ Badannya memperoleh keimunan seumur hidup. <i>Obtained when someone has been cured of a certain disease such as _____.</i> <i>His/Her body has acquired life long immunity.</i>	Diperoleh apabila badan seseorang menghasilkan antibodi setelah menerima suntikan _____ seperti BCG untuk mencegah _____. <i>Obtained when the body of a person produces antibodies after an injection of a _____ such as BCG to prevent _____.</i>	Bayi memperoleh keimunan melalui susu ibu. Embrio atau fetus dalam uterus memperoleh antibodi daripada ibu melalui tali pusat. <i>A baby obtains immunity through its mother's milk. An embryo or foetus obtains antibodies from its mother through the umbilical cord in the uterus.</i>	Seseorang disuntik dengan _____ yang diekstrak daripada darah haiwan untuk merawat penyakit seperti _____ dan _____. <i>A person is injected with an _____ that is extracted from animal blood to treat diseases such as _____ and _____.</i>