Tarikh:

BAB 1

1.6 KBAT **AKTIVITI PERBINCANGAN**

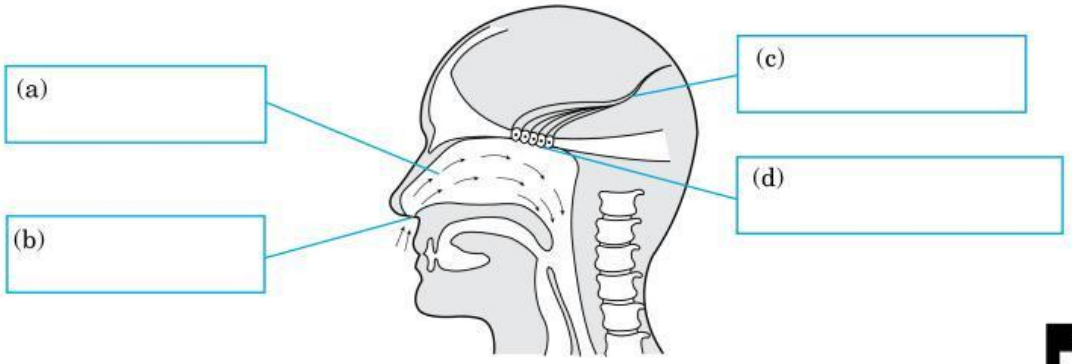
Struktur hidung dan pengesanan rangsangan
Structure of the nose and stimuli detection

PBD Masteri

Buku teks m/s 14 & 15

1 Labelkan struktur hidung dan kenal pasti kedudukan reseptor bau.
Label the structure of the nose and identify the position of the smell receptor.

Saraf olfaktori *Olfactory nerve*	Rongga hidung *Nasal cavity*	Lubang hidung *Nostril*	Sel deria bau *Sensory cells of smell*



Praktis Kendiri

2 Apakah fungsi hidung? TP1
What is the function of the nose?

Mengesan _____

To detect _____

3 Apakah nama lain bagi sel deria bau yang mengesan bau? TP1
What is the other name of the sensory cells of smell that detects smell?

_____

4 Di manakah terletaknya reseptor yang peka terhadap rangsangan bau? TP1
Where are the receptors that are sensitive to the smell stimuli located?

Di bahagian _____ rongga hidung./*At the* _____ *part of the nasal cavity.*

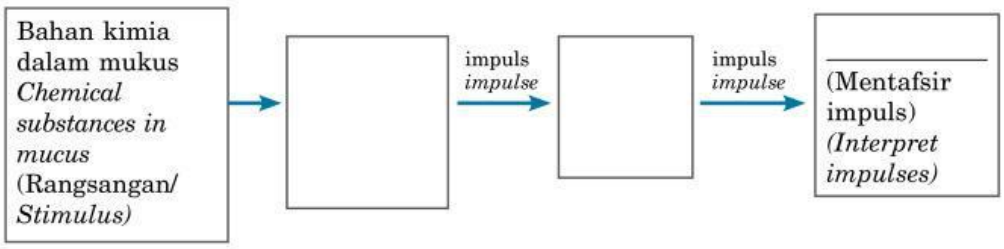
5 Aishah mendapati hidungnya **tidak** dapat menghidu bau makanan dengan baik apabila menghidap selesema. Berikan penjelasan anda. TP3/KBAT
Aishah finds that her nose is unable to smell the food well when she has flu. Give your explanation.

_____ dilitupi oleh satu lapisan tebal _____ yang menghalang _____ daripada makanan merangsang _____.

The _____ *are covered with a thick layer of* _____ *that prevents* _____ *from the food from stimulating the* _____.

6 Nyatakan laluan impuls setelah bahan kimia dalam udara diterima oleh reseptor di dalam hidung. TP2
State the path of an impulse after a chemical substance in the air is received by the receptor in the nose.

Otak *Brain*	Saraf olfaktori *Olfactory nerve*	Sel deria bau *Sensory cells of smell*



LIVEWORKSHEETS

1.7 AKTIVITI PERBINCANGAN

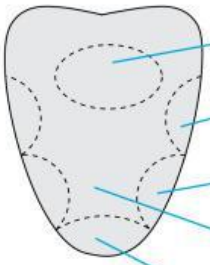
Struktur lidah dan deria rasa
The structure of the tongue and the sense of taste

PBD Kontekstual

Buku teks m/s 15

1 Labelkan jenis rasa pada bahagian lidah yang peka terhadapnya. Kemudian, padankan jenis makanan yang dirasa paling baik di bahagian itu./*Label the tastes which the parts of the tongue are sensitive to. Then, match the types of food that taste the best on those parts.* TP2

Masin/*Salty* Masam/*Sour* Manis/*Sweet* Umami/*Umami* Pahit/*Bitter*



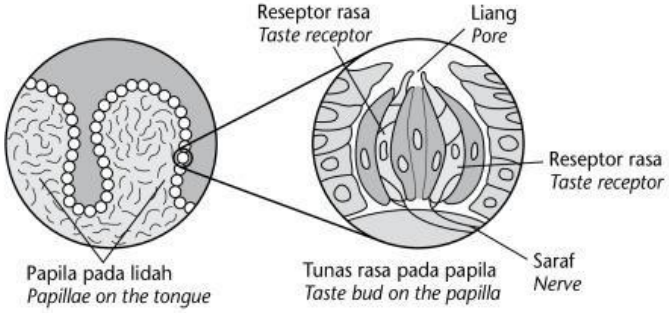
(a) •
(b) •
(c) •
(d) •
(e) •

Makanan/*Food*

- Cuka *Vinegar*
- Madu *Honey*
- Peria *Bitter gourd*
- Ikan masin *Salted fish*
- Daging *Meat*

2 Kaji rajah struktur lidah di bawah dan lengkapkan pernyataan. TP2
Study the diagram of the structure of tongue below and complete the statement.

Manis *Sweet*	Masin *Salty*	Masam *Sour*	Pahit *Bitter*	Reseptor rasa *Taste receptor*	Papila *Papillae*	Tunas rasa *Taste buds*	Umami *Umami*



_____ (bintik kecil) pada permukaan lidah dilapisi beratus-ratus _____ yang mengandungi _____. _____ ini dapat mengesan lima jenis rasa asas, iaitu _____, _____, _____, _____ dan _____. Rasa _____ dikaitkan dengan rasa lazat seperti rasa daging dalam sup atau mononatrium glutamat (MSG).

The _____ (small spots) on the surface of the tongue are covered by hundreds of _____ containing _____. These _____ can detect the five basic types of taste, i.e. _____, _____, _____, _____ and _____. The taste of _____ is associated with a delicious taste like meat in a soup or monosodium glutamate (MSG).

3 Lengkapkan peta alir di bawah untuk menunjukkan bagaimana lidah mengesan rasa. TP2
Complete the flow map below to show how the tongue detects tastes.

Bahan kimia dalam makanan melarut dalam air liur
The chemical substance in food dissolves in saliva
→ (a) → impuls *impulse* → (b) → impuls *impulse* → (c)

LIVEWORKSHEETS

Tarikh:

BAB 1

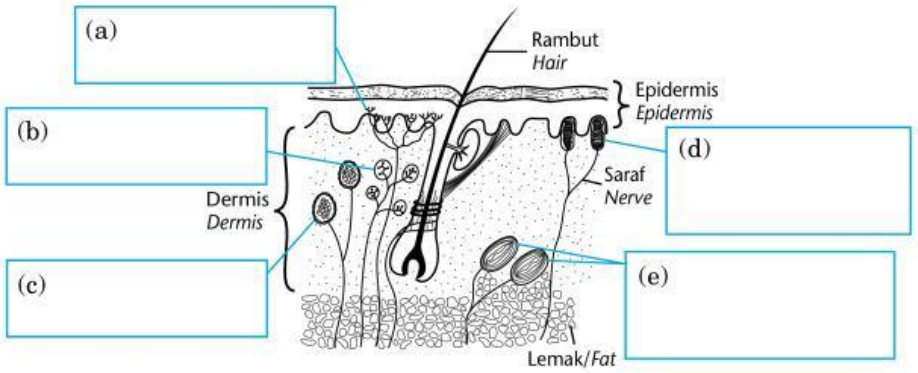
1.10 AKTIVITI PERBINCANGAN **Struktur kulit dan pengesanan rangsangan**
Structure of the skin and the detection of stimuli

PBD Masteri

Buku teks m/s 16

1 Kenal pasti dan labelkan jenis reseptor berlainan yang terdapat dalam kulit.
Identify and label the different types of receptors in the skin.

Reseptor sentuhan/*Touch receptor*
Reseptor sejuk/*Cold receptor*
Reseptor haba/*Heat receptor*
Reseptor sakit/*Pain receptor*
Reseptor tekanan/*Pressure receptor*



2 Nyatakan reseptor yang terletak dalam/*State the receptors situated in the* TP1

(a) epidermis/*epidermis* : _____

(b) dermis/*dermis* : _____

_____

(c) lapisan lemak/*fat layer* : _____

3 Apakah lapisan kulit yang/*What is the skin layer which* TP1

(a) melindungi permukaan luar badan?
protects the outer surface of the body?

_____

(b) mengandungi salur darah, kelenjar peluh dan reseptor?
contains blood vessels, sweat glands and receptors?

_____

4 Tandakan (✓) fungsi lain kulit./*Tick (✓) other functions of the skin.* TP1

Praktis Kendiri

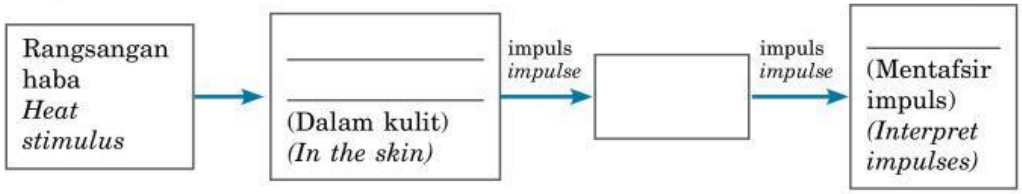
☐ Mengawal atur suhu badan
Regulates body temperature

☐ Membasmi mikroorganisma
Destroys microorganisms

☐ Mencegah kehilangan air berlebihan
Prevents excessive water loss

5 Lengkapkan peta alir tentang laluan impuls setelah rangsangan haba diterima oleh reseptor dalam kulit./*Complete the flow map about the path of an impulse after a heat stimulus is received by the receptor in the skin.* TP2

Saraf/*Nerves* Otak/*Brain* Reseptor panas/*Heat receptor*



LIVEWORKSHEETS