BAB 1

1.1 KBAT

AKTIVITI PERBINCANGAN

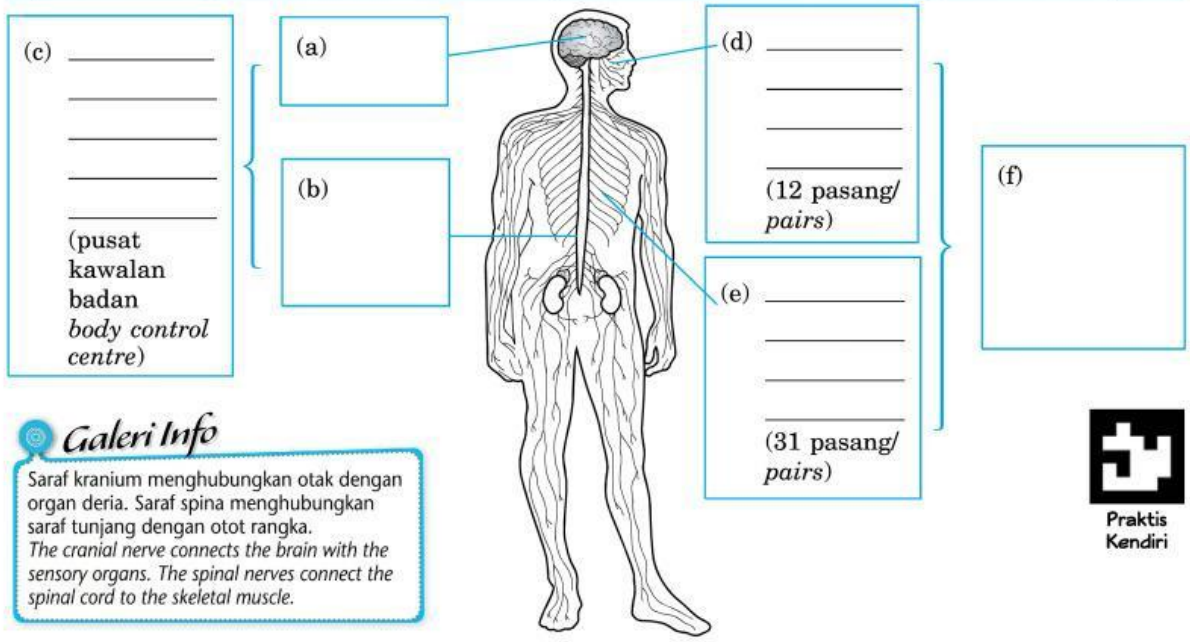
Sistem saraf manusia
The human nervous system

PBD Masteri

Buku teks m/s 4 – 5

1 Labelkan sistem saraf manusia yang diberi di bawah. TP1
Label the human nervous system given below.

Saraf tunjang *Spinal cord*	Saraf spina *Spinal nerves*	Sistem saraf pusat *Central nervous system*	Saraf kranium *Cranial nerves*	Otak *Brain*	Sistem saraf periferi *Peripheral nervous system*



Galeri Info

Saraf kranium menghubungkan otak dengan organ deria. Saraf spina menghubungkan saraf tunjang dengan otot rangka.
The cranial nerve connects the brain with the sensory organs. The spinal nerves connect the spinal cord to the skeletal muscle.

Praktis Kendiri

2 Baca perbualan di bawah. Kemudian, tulis jawapan yang mungkin diberikan oleh murid itu dalam ruang yang disediakan dalam rajah di bawah. TP4/KBAT
Read the conversation below. Then, write the possible answers given by the student in the space provided in the diagram below.



Maklumat/*Information*
Rangsangan/*Stimuli*
Gerak balas/*Response*
Impuls/*Impulses*
Mentafsir/*Interpret*

Sistem saraf manusia dapat:/*The human nervous system is able to:*
(a) mengesan _____/*detect* _____.
(b) menghantar _____ dalam bentuk _____.
send _____ *in the form of* _____.
(c) _____ impuls./_____ *impulses.*
(d) menghasilkan _____ yang sesuai.
produce an appropriate _____.

LIVEWORKSHEETS

Tarikh:

1.2 AKTIVITI PERBINCANGAN

Tindakan terkawal dan luar kawal
Voluntary and involuntary actions

PBD
Masteri

Buku teks m/s 6 – 8

BAB 1

1 Bezakan tindakan terkawal dan luar kawal di bawah. TP2
Differentiate the voluntary and involuntary actions below.

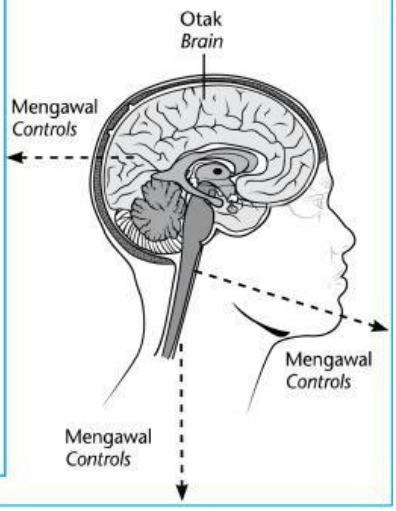
Membaca *Reading*	Tidak sedar *Unconscious*	Tersentuh *In contact*	Bercakap *Talking*	Tangan *Hand*
Menulis *Writing*	Sedar *Conscious*	Pernafasan *Breathing*	Peristalsis *Peristalsis*	Denyutan jantung *Heartbeat*

(a) **Tindakan terkawal**
Voluntary actions

(i) Tindakan yang dilakukan secara _____.
Actions that are taken under _____ *control*

(ii) **Contoh tindakan:**
Examples of actions:

_____
_____
_____
_____



(b) **Tindakan luar kawal**
Involuntary actions

(i) Tindakan yang berlaku secara _____.
Actions that occur under _____ *control.*

(ii) **Contoh tindakan:**
Examples of actions:

- Medula oblongata:
  Medulla oblongata:

_____
_____
_____
_____

- **Saraf tunjang/*Spinal cord:***

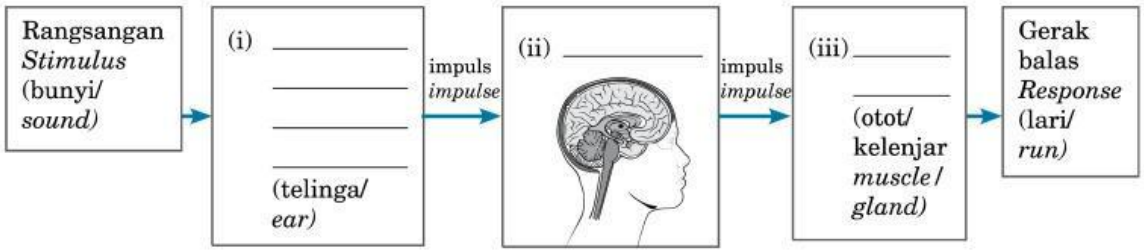
Menarik _____ apabila _____ cerek panas
Withdrawing of _____ *when* _____ *with a hot kettle*

Praktis Kendiri

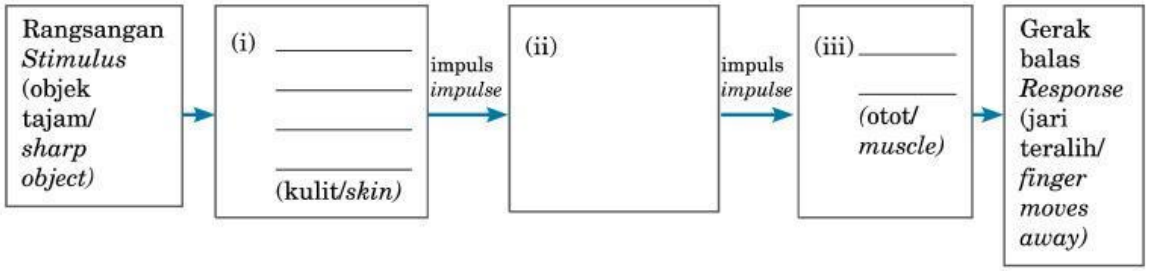
2 Lengkapkan peta alir tentang urutan aliran impuls dalam tindakan terkawal dan luar kawal. TP1
Complete the flow map with the sequences on the pathway of an impulse in voluntary and involuntary actions.

Saraf tunjang *Spinal cord*	Efektor *Effector*	Afektor (reseptor) *Affector (receptor)*	Otak *Brain*

(a) **Tindakan terkawal/*Voluntary action***



(b) **Tindakan luar kawal/*Involuntary action***



LIVEWORKSHEETS