

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
বিস্মিল্লাহির রাহ্মানির রাহীম



উদ্দান

একাডেমিক এন্ড এডমিশন কেয়ার

ca mca

Class Eight- Science Care

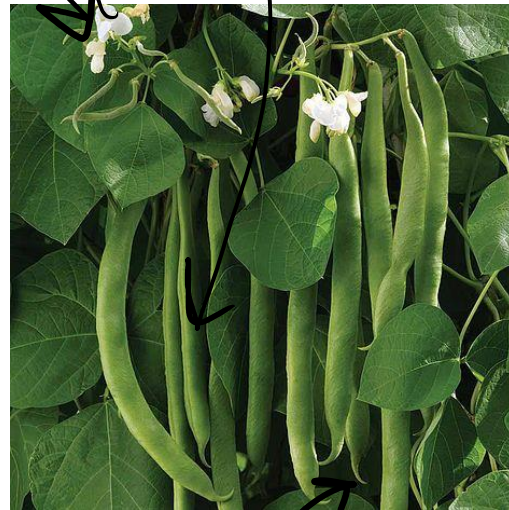
Chapter 5 “ Co-ordination and Secretion”

Plant
Reproduction



What is Co-ordination and Secretion?

seed 2-3 | Invas. Chemical
Phyto Hormone

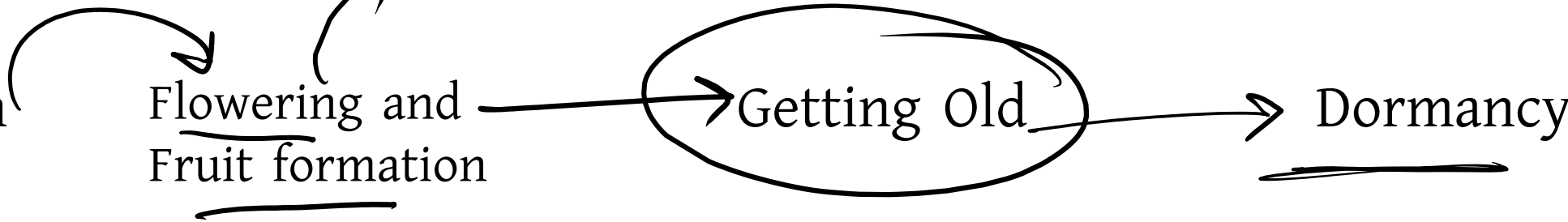


Germination

Flowering and
Fruit formation

Getting Old

Dormancy

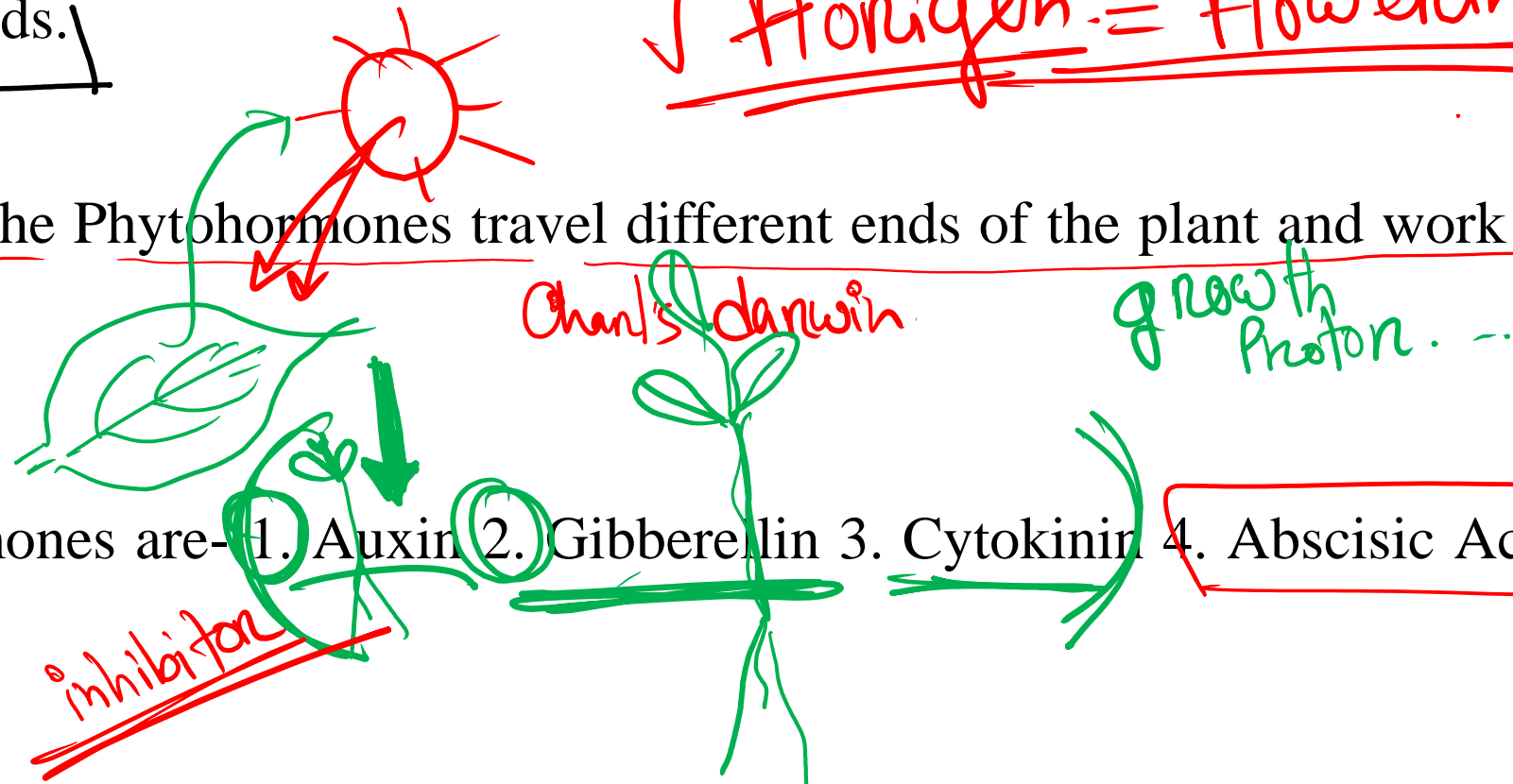


What is Phytohormones and Why?

✓ **Phytohormones are organic chemicals which are formed to control the germination, flowering, Fruit formation, dormancy of a plant. And make a balance between these periods.

✓ Florigen = flowering

**After formation the Phytohormones travel different ends of the plant and work in different ways.



**Some Phytohormones are- 1. Auxin 2. Gibberellin 3. Cytokinin 4. Abscisic Acid

5. Ethylene

gas

inhibitor

1. Gibberellin
2. Auxin
3. Cytokinin
4. Ethylene
5. Absciscic Acid

Phytohormones
(Plant hormones)

	Germination	Growth	Flowering	Fruit	Oldening	Dormancy
Gibberellin	✓	✓	✓	✓	✗	✗
Auxin	✗	✓	✓	✓	✗	✗
Cytokinins	✗	✓	✓	✓	✗	✗
Ethylene	✗	✗	✓	✓	✓	✗
Absciscic Acid	✗	✗	✗	✗	✓	✓

Phototropism

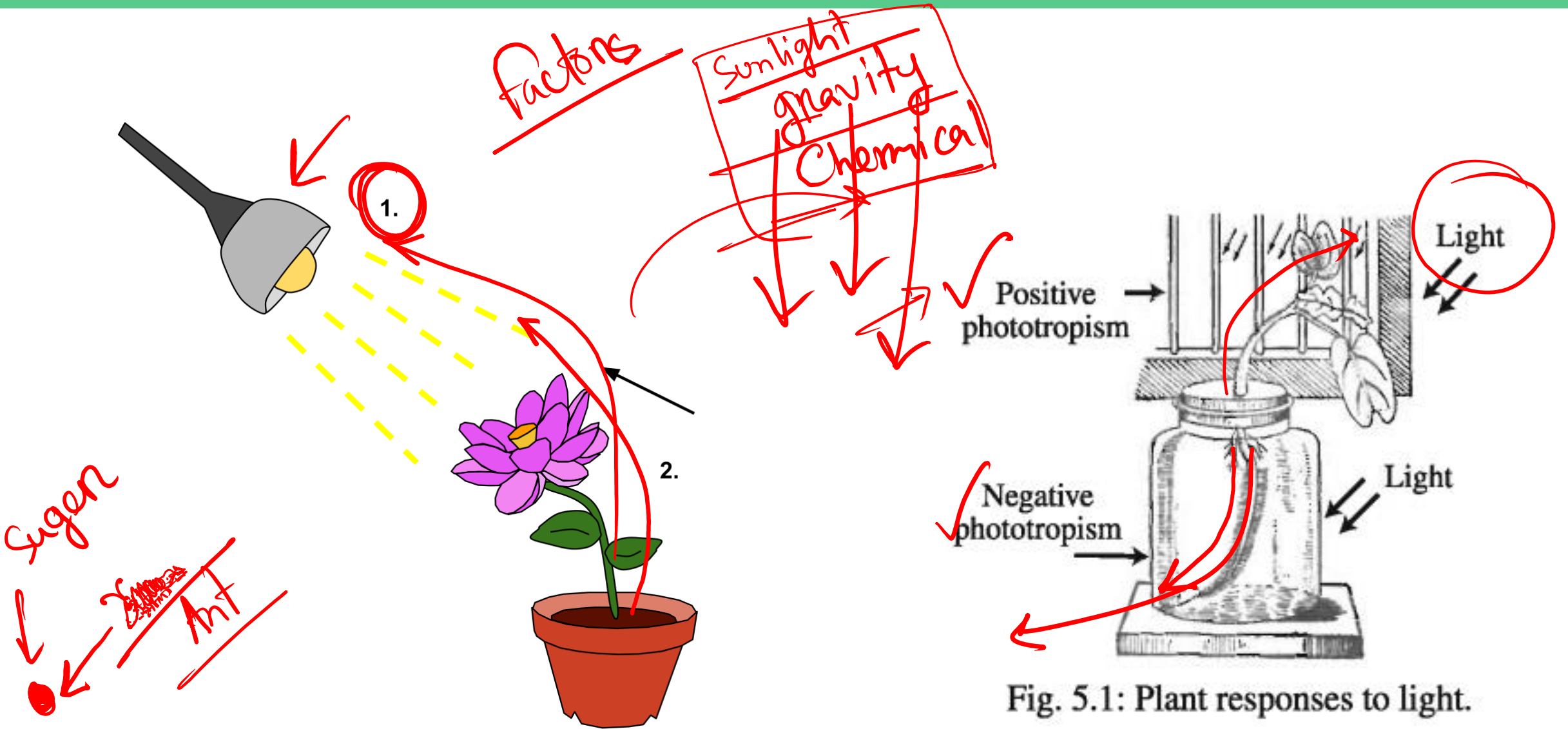
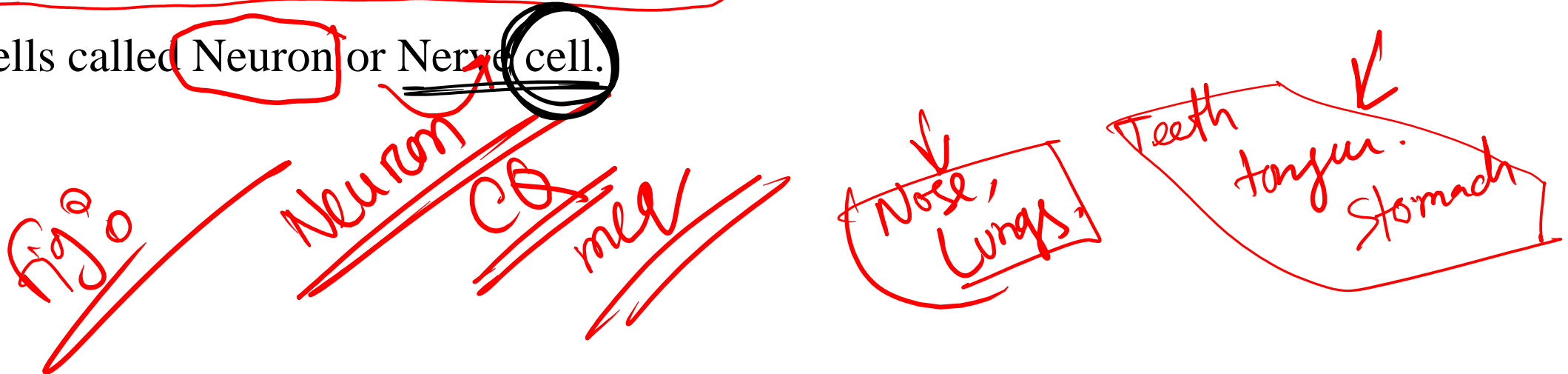


Fig. 5.1: Plant responses to light.

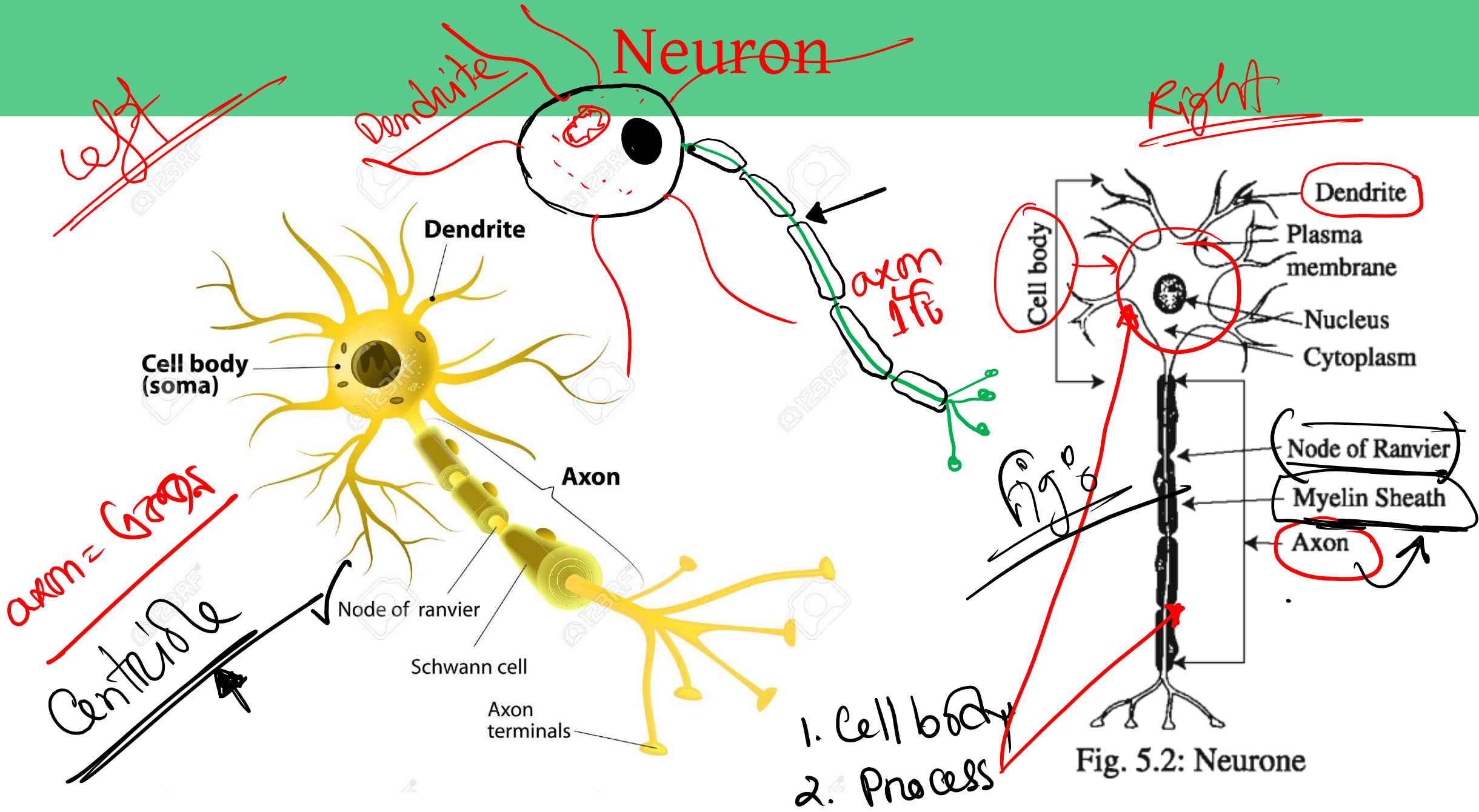
Co-ordination in animals: Nervous System

↳ To Carry stimuli from different parts of the body, co ordinate the activities of different organ system of the body, and to keep harmony with the environment are the main functions of Nervous system.

Brain is the main part of nervous system, which is formed by numerous specialized cells called Neuron or Nerve cell.

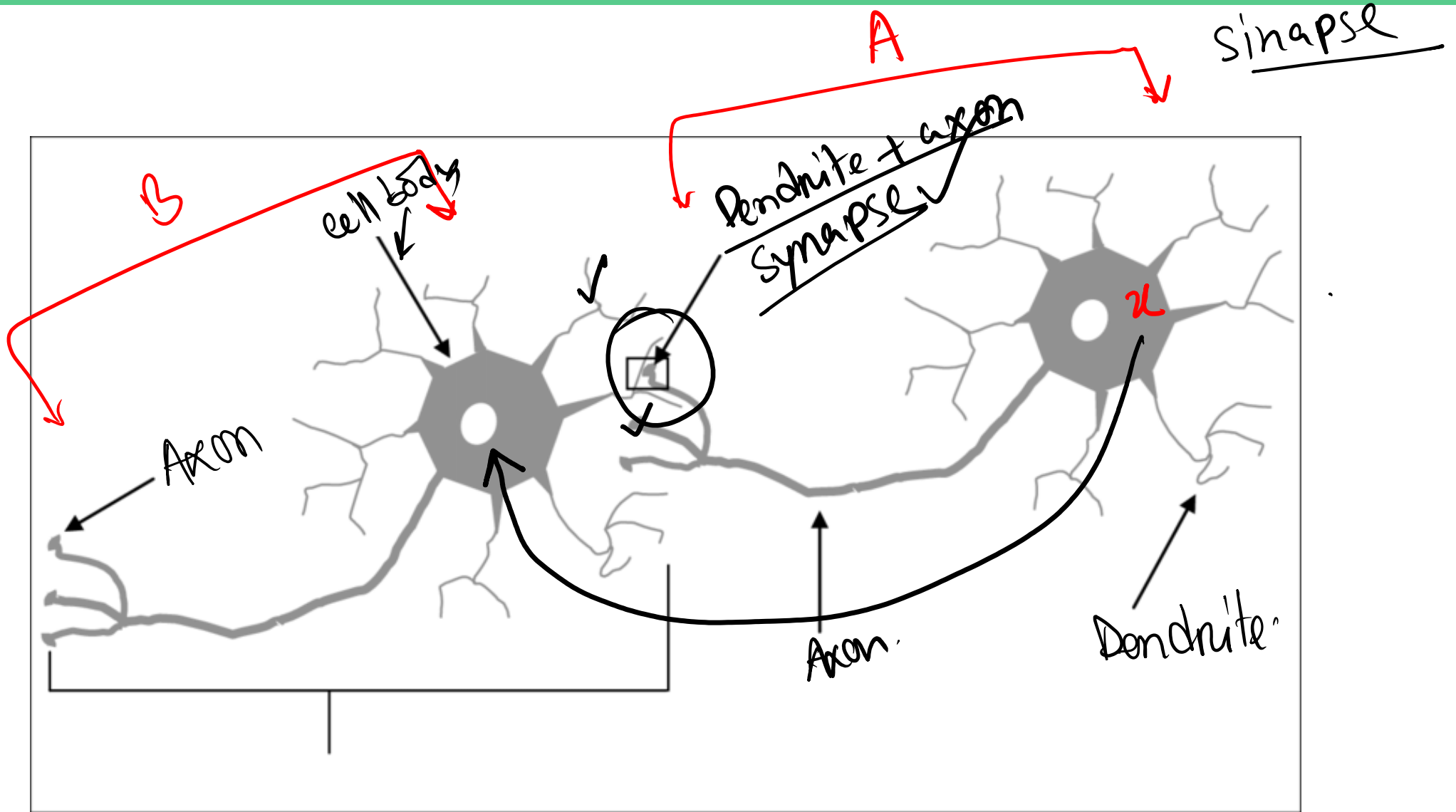


Neuron



Communication Between Neurons

1000 crone



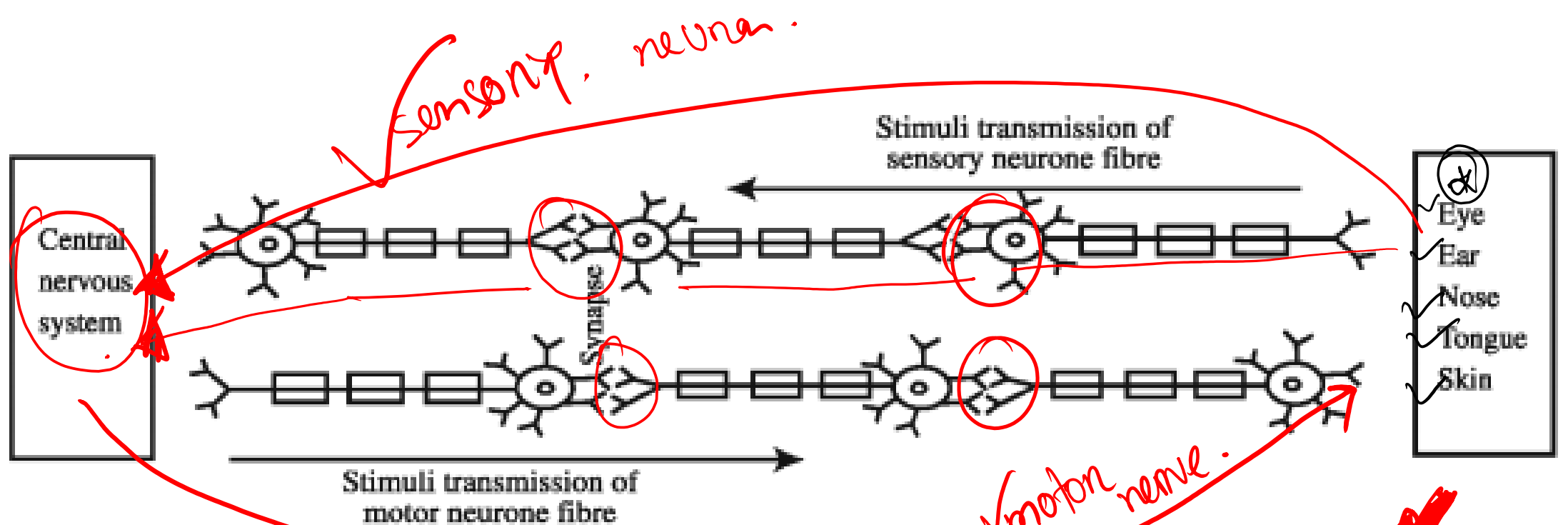
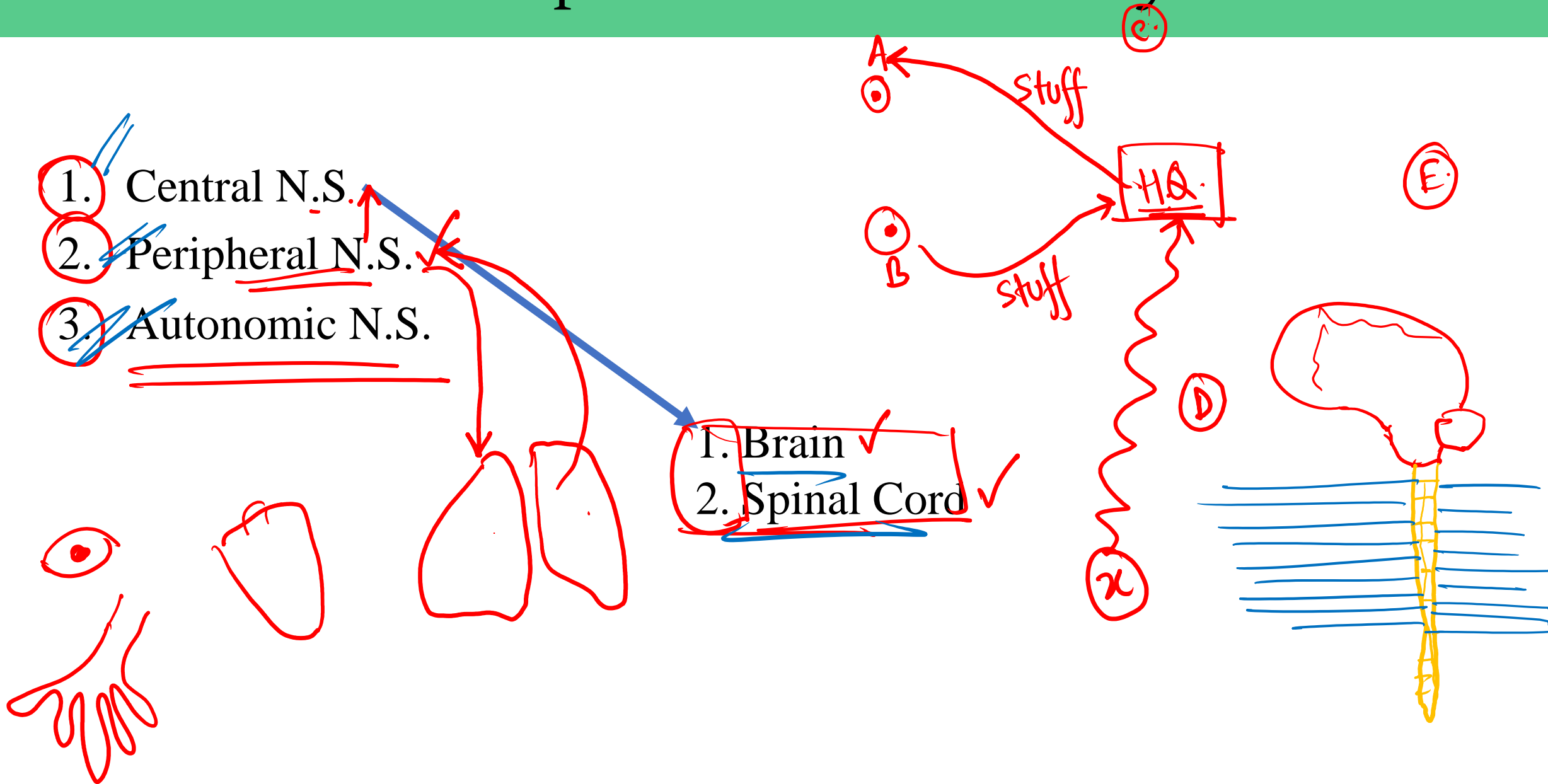


Fig. 5.3: Flow chart of the transmission of an impulse of the nervous system.

① To carry stimuli, to maintain communications between internal and external environment of the body, coordinate the activities of different organ systems of the body, retain memory and to think and pass instructions for work are the functions of neurone. The transmission of impulses through the synapses of nervous system (neurone) are shown in the figure.

②
③
④
⑤

There are 3 parts of Nervous System



Brain

✓ Meninges mca

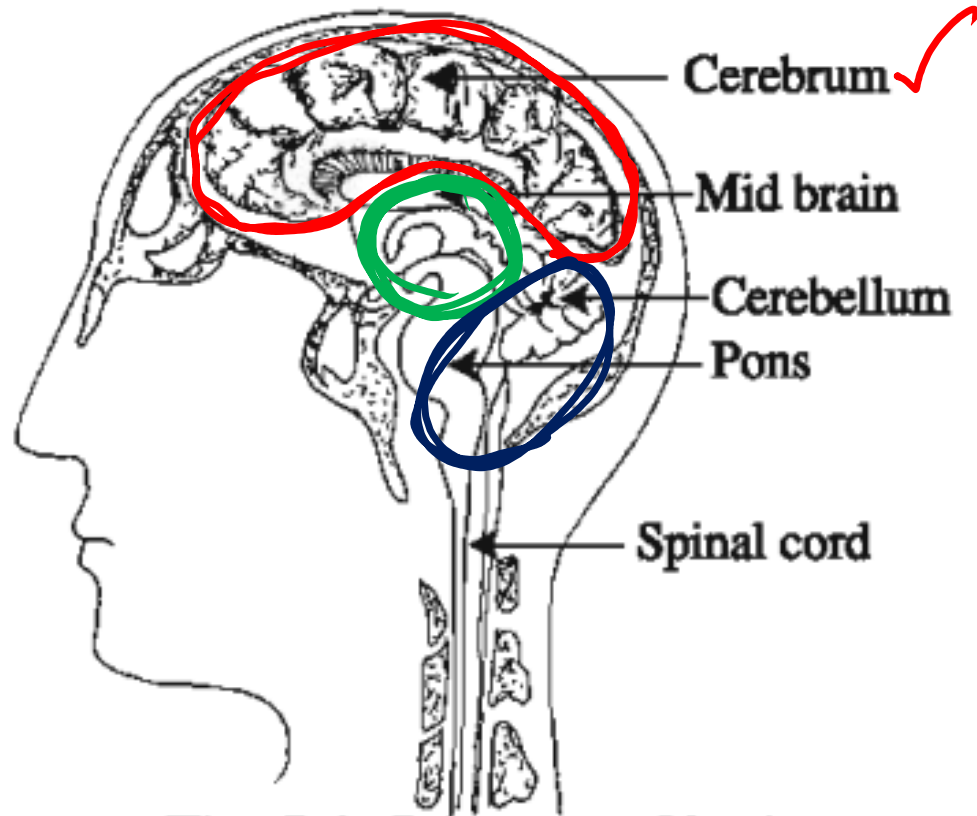


Fig. 5.4: Structure of brain

1. Cerebrum (Fore brain)

2. Mid Brain

3. Hind Brain

① Fore brain

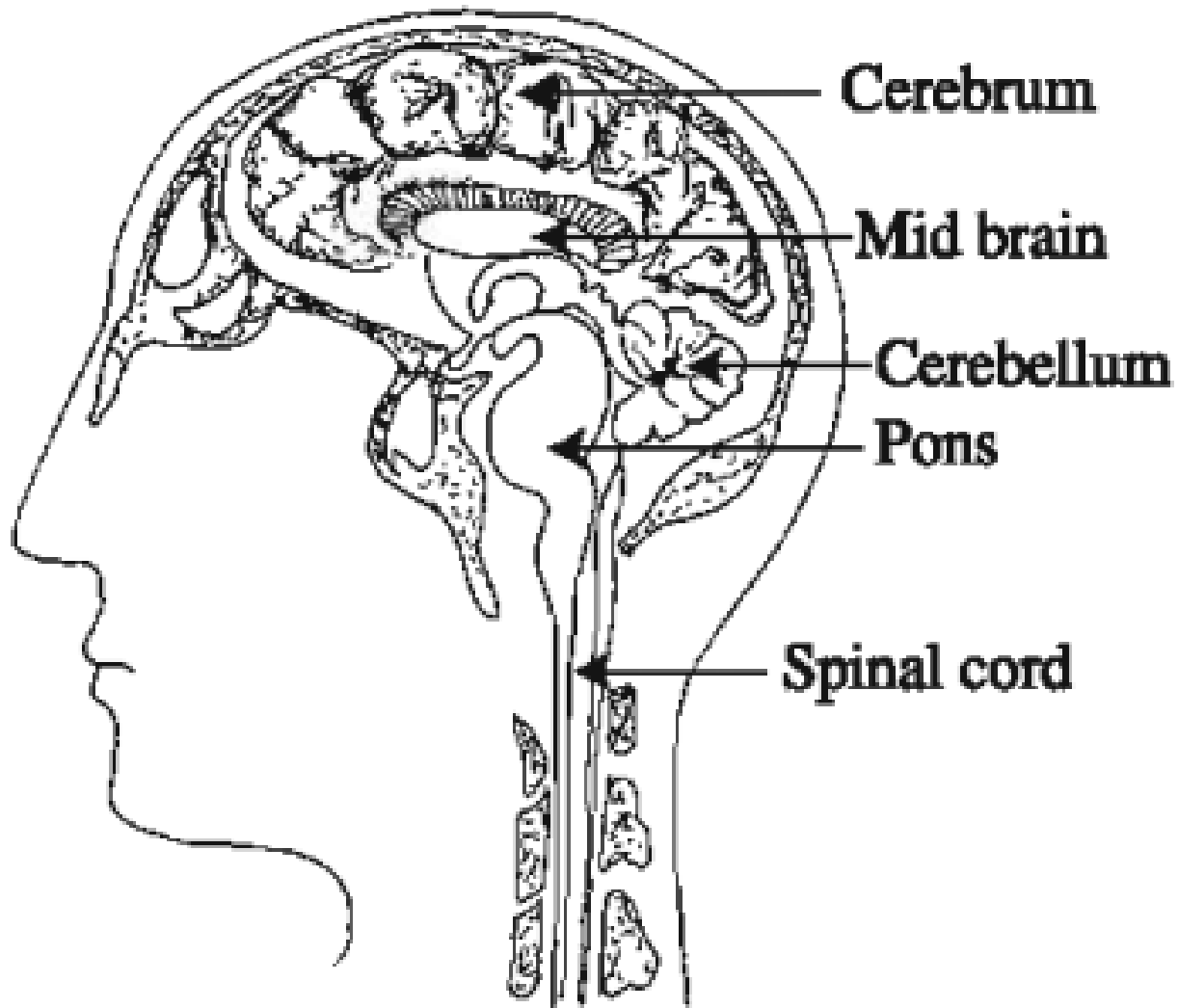


Fig. 5.4: Structure of brain

Fore-Brain

1. Cerebrum ✓ 80%
2. Thalamus
3. Hypothalamus

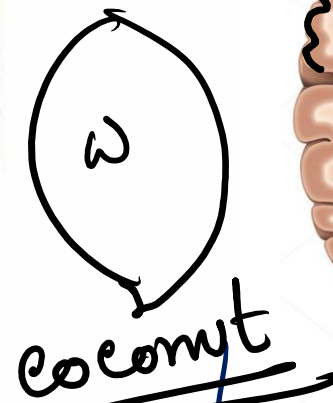
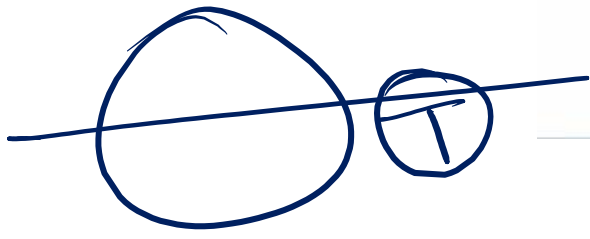
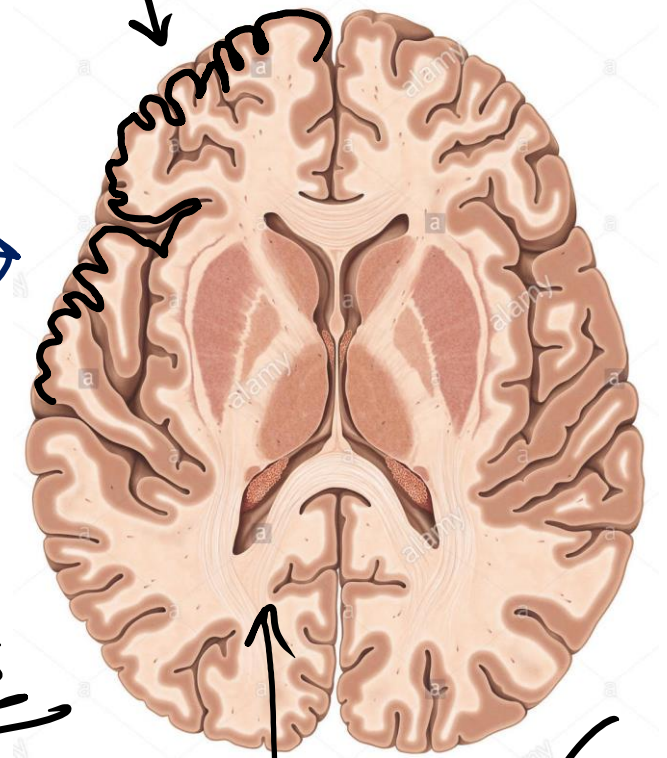
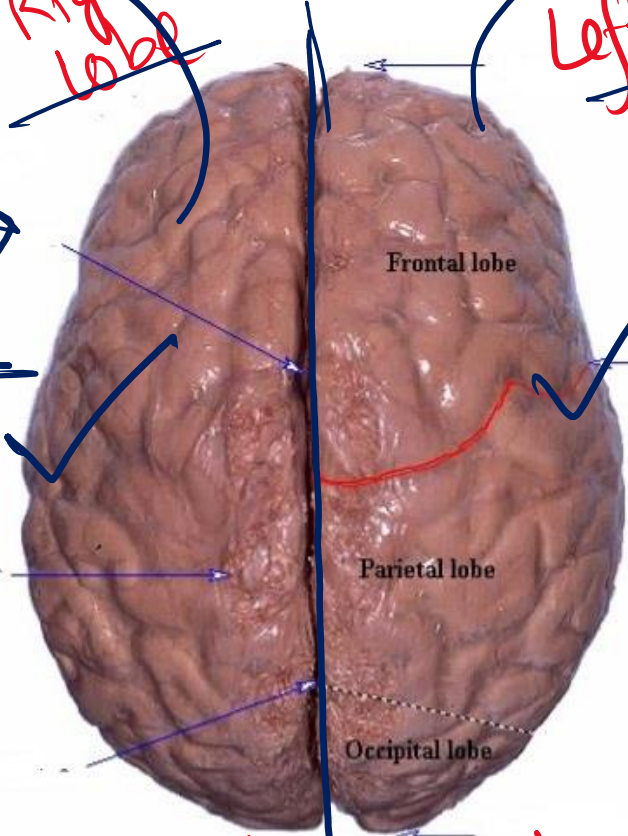
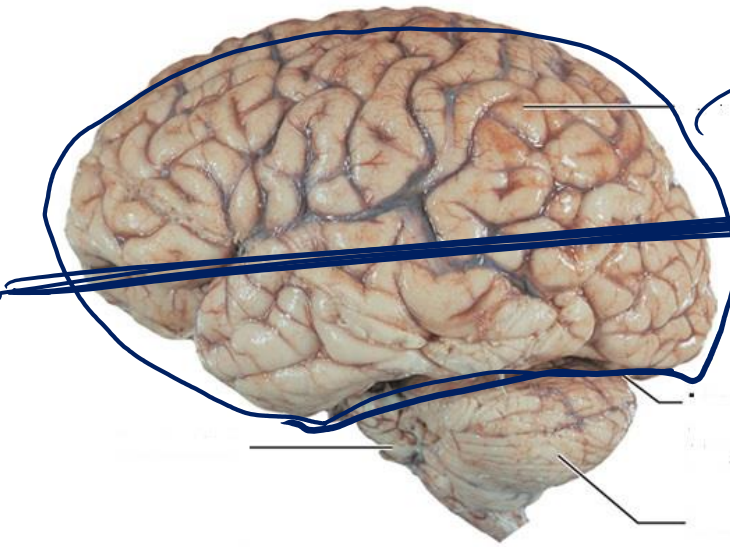
Cerebrum

vision,
Hearing,
Smell

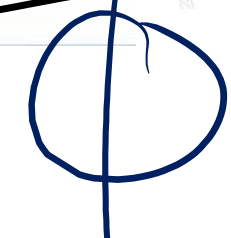
Thoughts
Memory
Knowledge

Right lobe

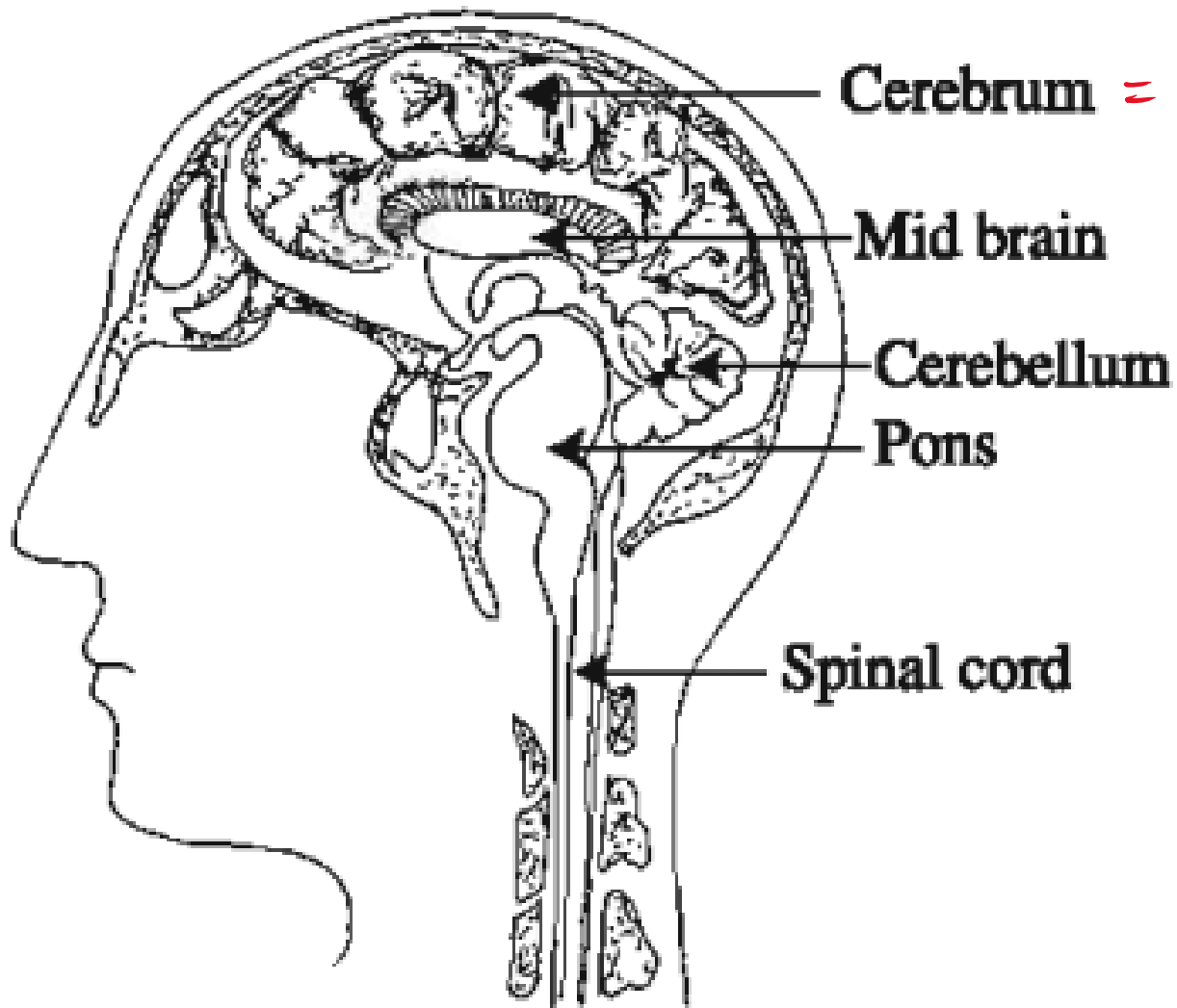
Left lobe



Cerebral hemisphere



white



Cerebrum = intelligent part

Fore-Brain

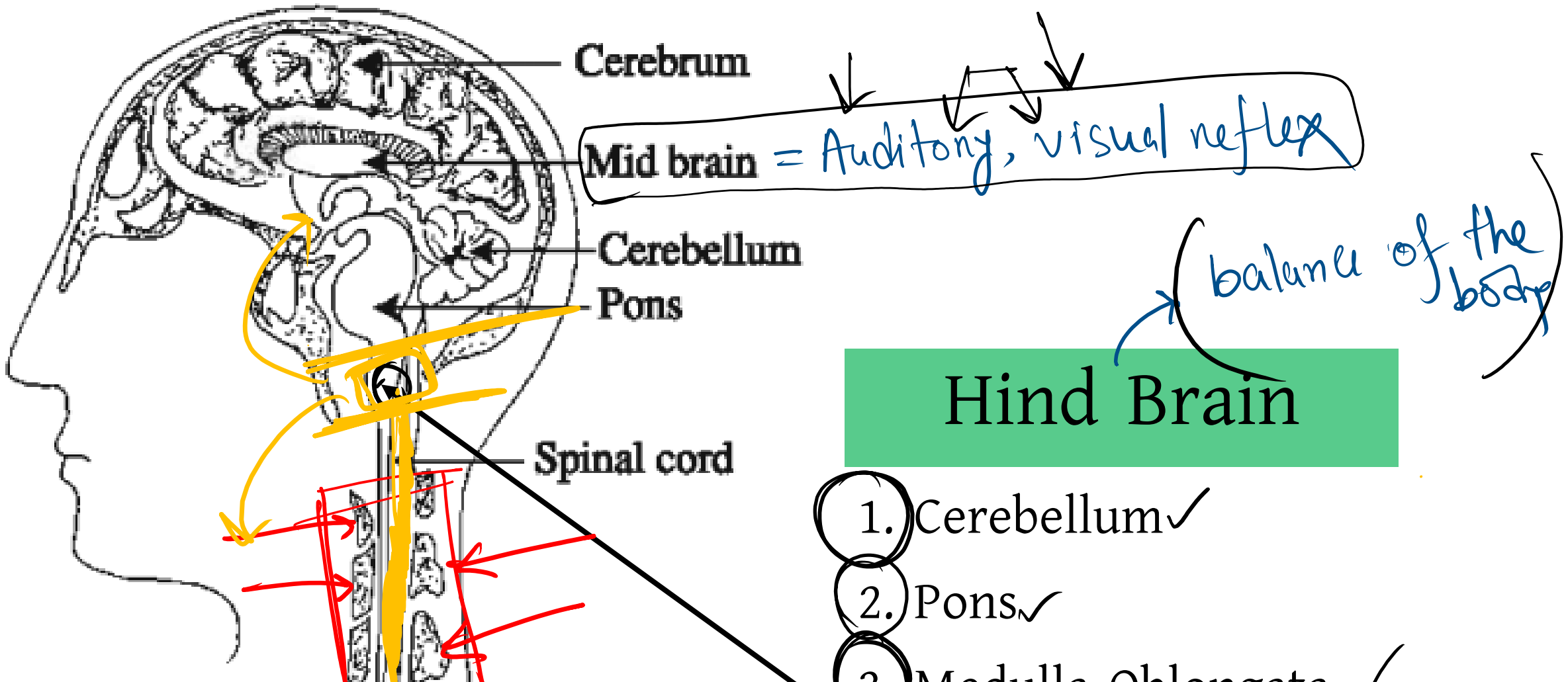
1. Cerebrum

② Thalamus

③ Hypothalamus

✓ Anger, ✓ Shame
✓ Hot, ✓ cold,
✓ Sleep, ✓ temp.

Fig. 5.4: Structure of brain



Cerebrum

Mid brain = *Auditory, visual reflex*

Cerebellum

Pons

Spinal cord

Hind Brain

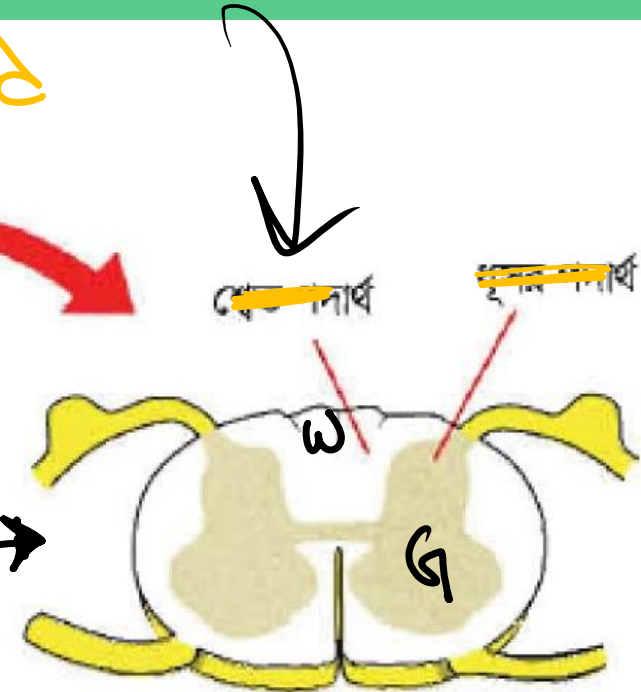
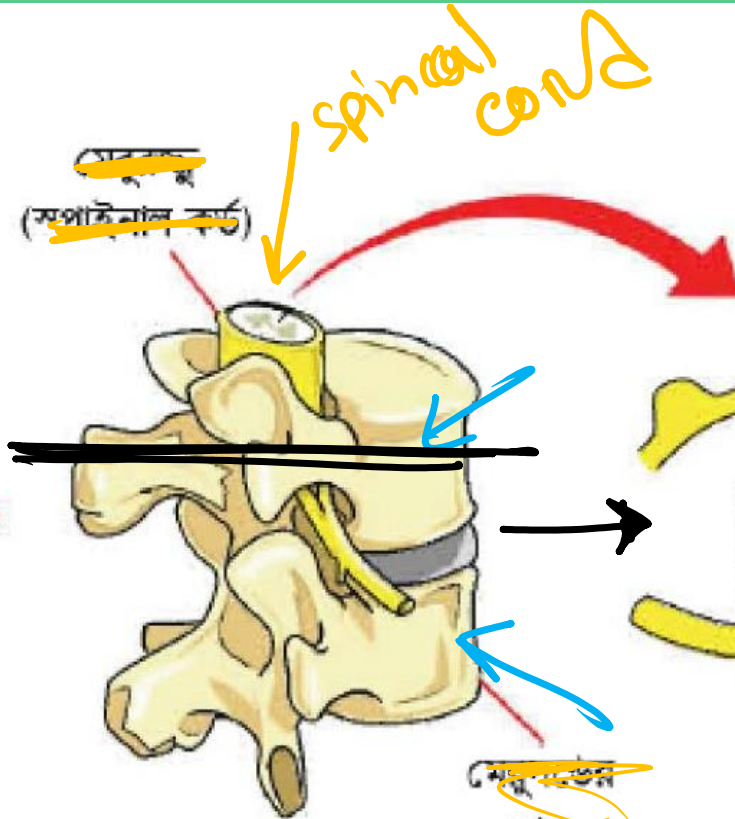
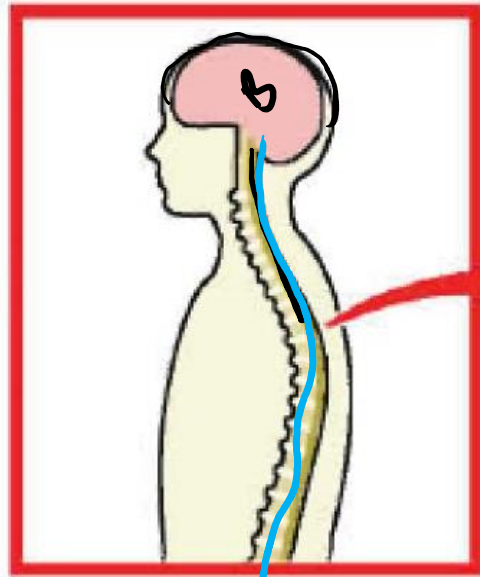
- 1. Cerebellum ✓
- 2. Pons ✓
- 3. Medulla Oblongata ✓

Heart beat, breathing, ✓

balance of the body

Fig. 5.4: Structure of brain

Spinal Cord



Brain
बाह्य = Grey
आन्तर्य = White
Coconut

दिनांक 10.06.2023

बाह्य = White
आन्तर्य = Grey

Reflex Action

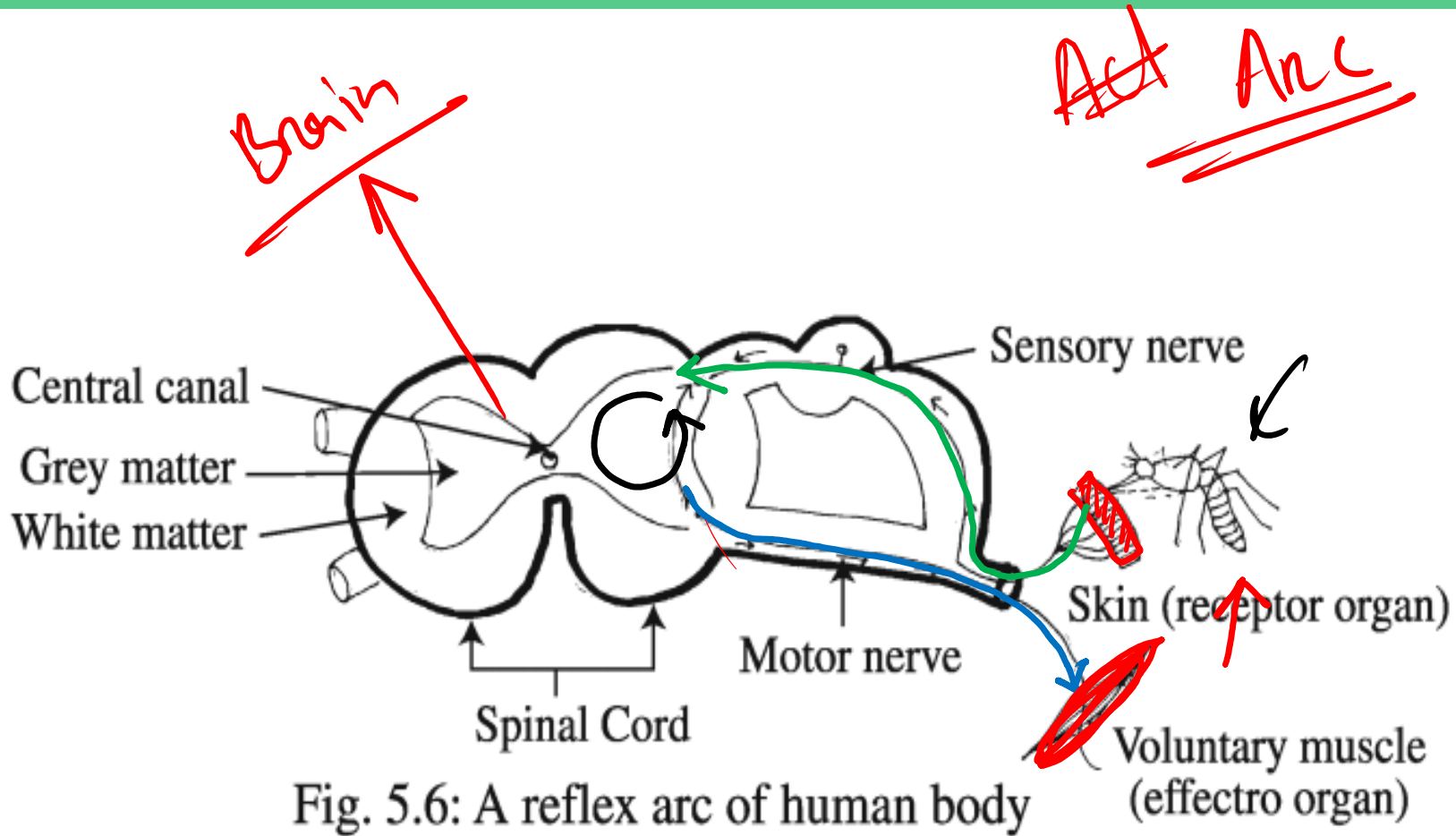
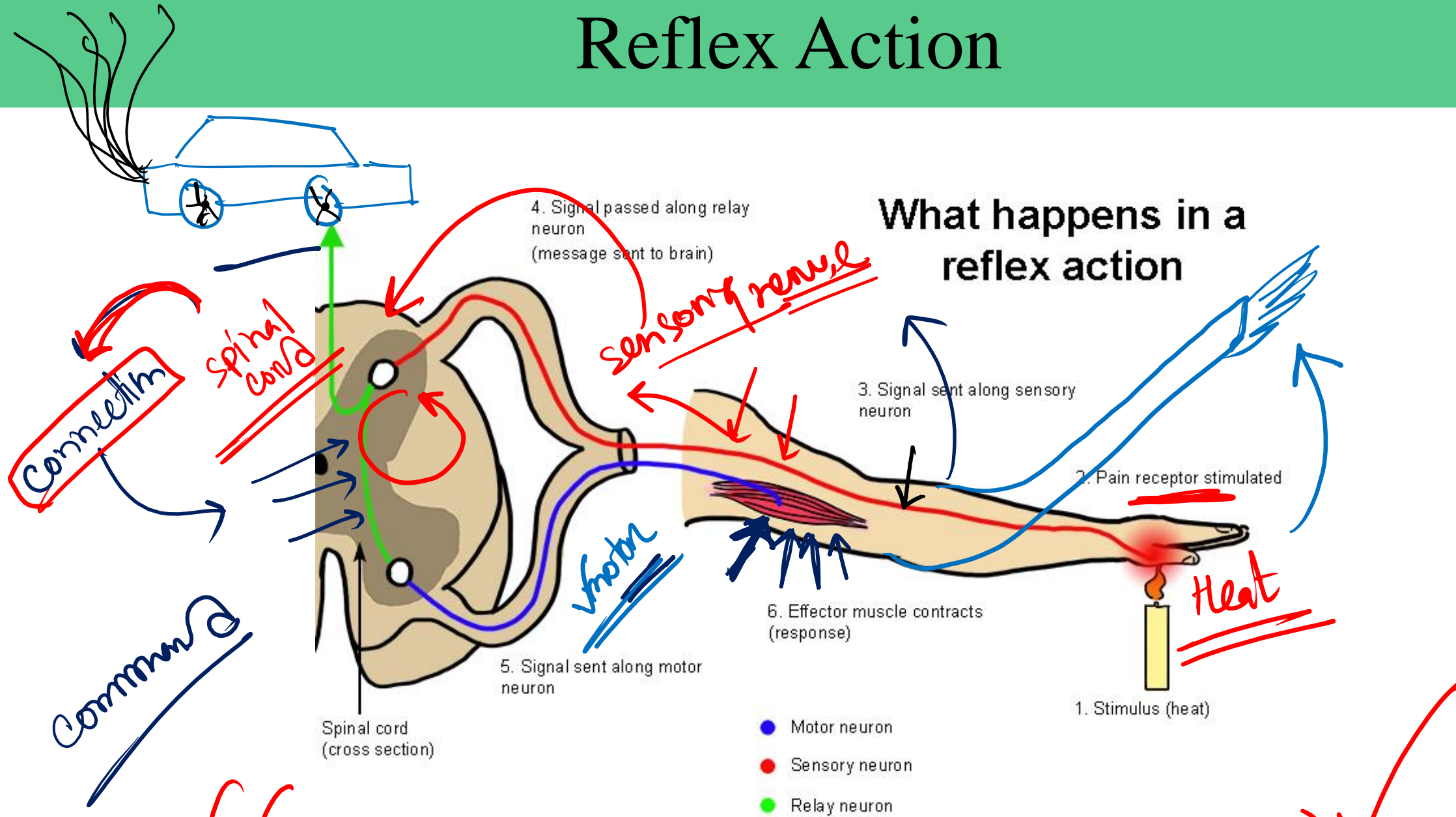


Fig. 5.6: A reflex arc of human body

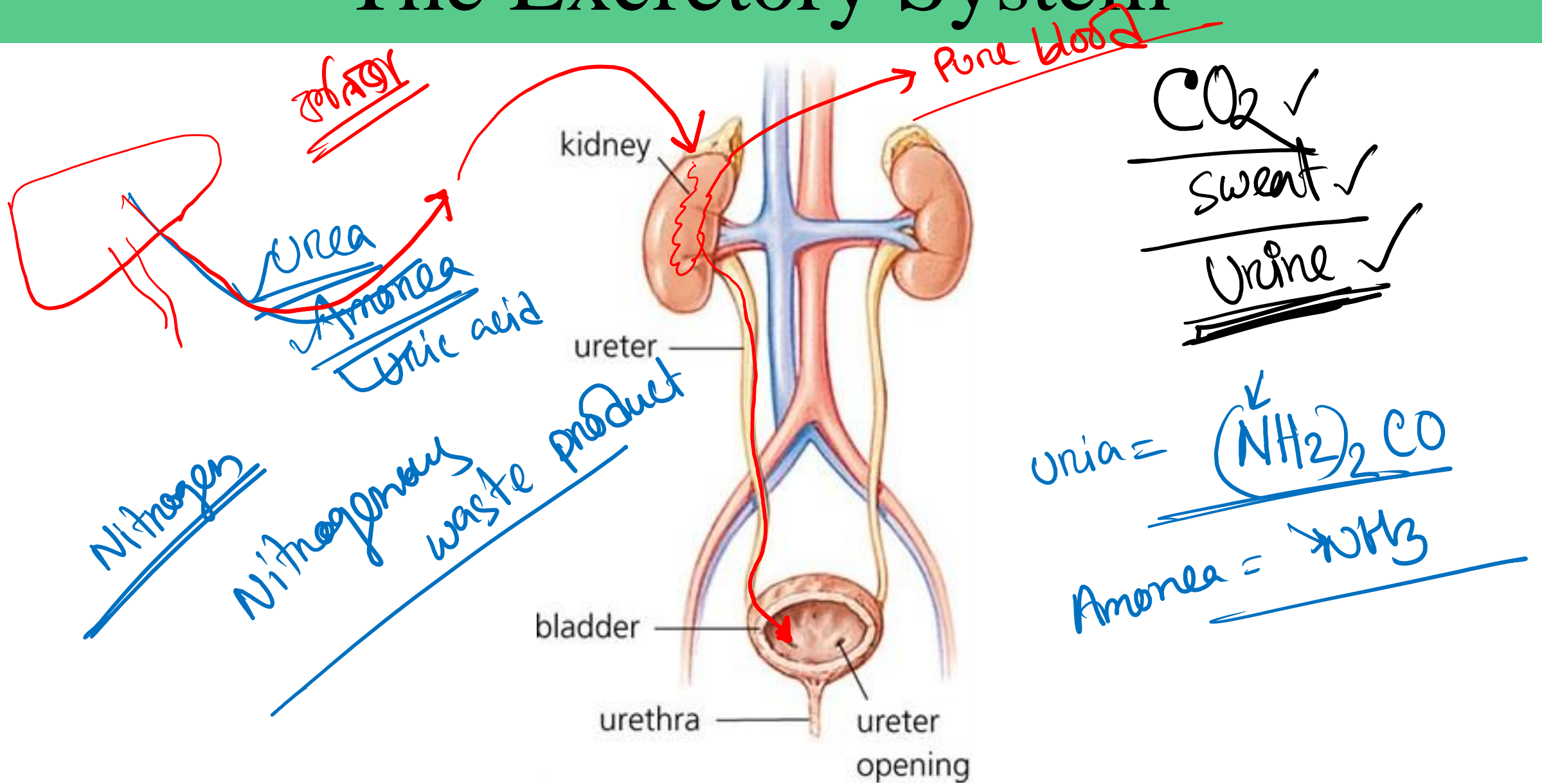
- There are 5 parts of a Reflex arc-
1. Receptor = Skin
 2. Sensory Nerve
 3. Reflex center
 4. Motor nerve
 5. Effector organ

Reflex Action



Reflex action is controlled by Spinal cord not by the Brain

The Excretory System



CO₂ ✓
Sweat ✓
Urine ✓

Excretion

Excretion is a process by which organism removes harmful, unwanted waste products from the body.

Different types of wastes are formed into body due to metabolism Such as- Carbon Dioxide, Urea, Water etc. These should be removed from the body because of poisonous effects. Moreover, they are toxic and their retention in the body may cause intoxication and even death of the organism. These waste products are expelled out from the body mainly through expelled air, sweat and urine. Thus,

Lungs, skin and kidney are the three main organs of excretion.

Urea is a nitrogenous waste which is too harmful for the body, 80% of the total nitrogenous excretory products are eliminated through Urine. So, Kidney is termed as the main excretory organ of the body.

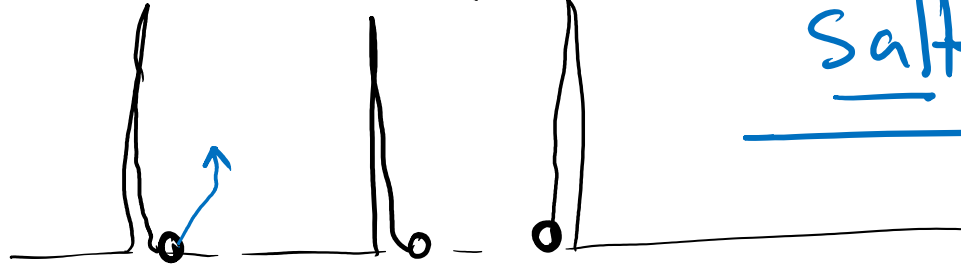
Excretory waste products

1. Carbon-Dioxide:

4% CO₂ , H₂O(g)

Salty, CO₂

2. Sweat-



3. Urine-

Yellowish

Kidney = 2L

urea, uric acid, Ammonia.

Purify blood

Heart = blood pump

শেগে থাকো সৎভাবে,
স্বপ্ন জয় তোমারই হবে

ঊদ্ভাস-উন্মেষ শিক্ষা পরিবার