

Any help in learning these little molecules prove truly valuable [10 essential amino acids] (arginine histidine isoleucine leucine threonine lysine methionine phenylalanine tryptophan valine)

Super Genius Father of Chintu (species, genus, family, order, class, phylum/division, kingdom, domain)

I prefer milk and tea (interphase prophase metaphase telophase)

BAHL (BASIC AA= arginine, histidine, lysine)

ZA BC (Z dna=12 bp, A dna= 11 bp, B dna =10bp, C dna=9 bp)

CADET Face Right -(CO₂, ACID, 2,3DPG, EXERCISE, TEMP RISE - Leads to shifting of oxyhb curve to right)

RBI - reptiles, birds, insects (all uricotellic)

LIZA - light band, isotropic band, z line, actin proteins

DHAM - dark band, h zone, anisotropic band, myosin proteins

KAN - BIPOLAR NEURONS - kaan aankh naak (ie ears, eyes, nose)

MTB - muscles to bones = Tendons

SRK - Summer, rice, kharif crops

LONG PPT- (Lipopoly sachharide, gram negative) (positive, techoic acid)

PSM - Persistent Calyx, solanaceae, malvaceae

BHMS - brassicaceae, hypogynous, malvaceae, solanaceae (superior ovary)

AEIOU - asteraceae, epigynous, inferior ovary, cucurbits, Gulabi Parii - perigynous, rose

O BOMB - orange (unipalmate), begonia (bipalmate), oxalis (tripalmate), marsilea (tetrapalmate), bombax (multipalmate leaves)

NAMC- Neem (unipinnate leaves), acacia (bipinnate), moringa (drumsticks- tripinnate), coriander (multipinnate)

DC PANDEY and MS DHONI - (dicot, calophyllum =parallel venation) (monocot, smilax, dioscoria reticulate)

STP SAM - solitary terminal poppy, solitary axial malvaceae

Faltu DP (Free central- dianthus, primula)

BAP (Basal- asteraceae, poaceae)

The 5 sphincters found in the Alimentary Canal are APE OIL: Anal, Pyloric, Lower Esophageal, Oddi, and ileocecum.

B vitamin names

'Thrice Rice Nice Price Cries': In increasing order: Thiamine (B1) Riboflavin (B2) Niacin (B3) Pyridoxine (B6) Cobalamin (B12)

Blots: SNOW DROP: Match up the 1st word letter with 2nd word letter:

Southern=DNA

Northern=RNA

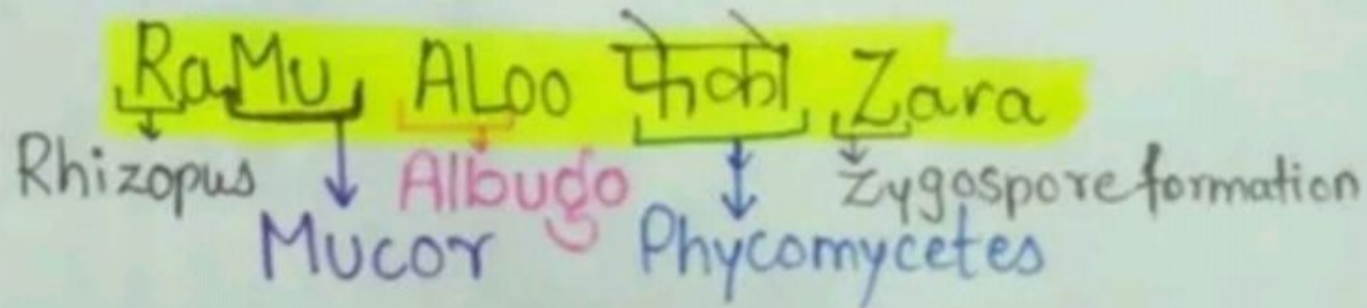
Western=Protein

The O's in snow drop are zeros, since there is no Eastern blot.

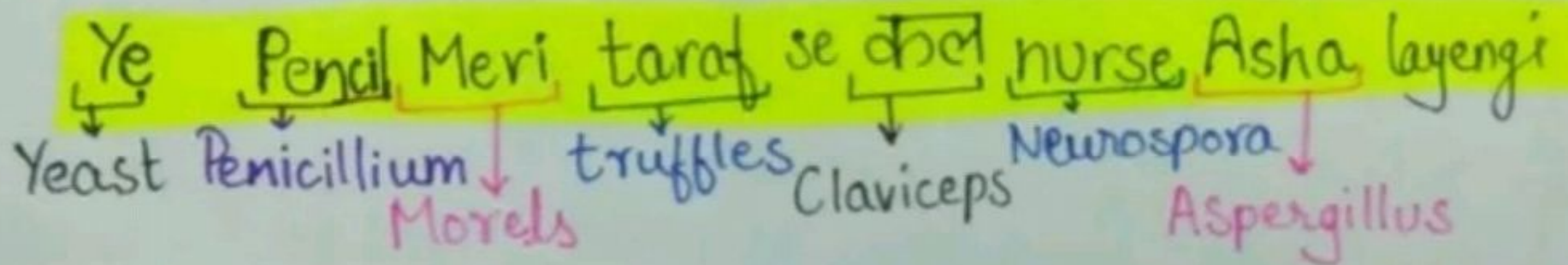
Hardy-Weinberg equilibrium: causes for deviations from it-

Maggie May Does Not Smoke: Mutations Migration Drift Non-random mating Selection

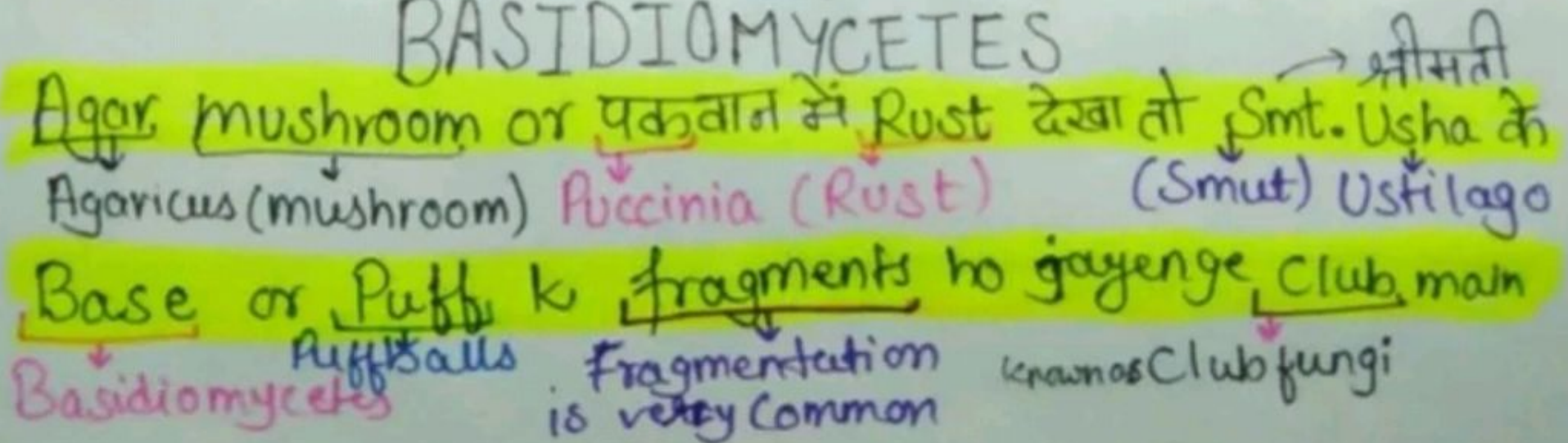
PHYCOMYCETES



ASCOMYCETES



BASIDIOMYCETES



Examples of PHAEOPHYCEAE

फिर Algin Sale, फसा दिशा एक दिक्कत main.

Phaeophyceae ^{Algin Coating} ^{Fucus} Laminaria ^{Ectocarpus} Dictyota
Sargassum

Examples of Rhodophyceae

Policy पूरी तो जेल में Roadwali हरी Crispy Grass खानी होती

Polysiphonia ^{Gelidium} Rhodophyceae ^{Chondrus Crispus} Harveyella Gracilaria
Porphyra

Examples of Chlorophyceae with shape of Chloroplasts.

Pyari Supriya चारु चार Disco gyi Free plate do Roti
pyrenoid present in ^{Spiral} ^{Chloroplast} ^{Disco} ^{gyi} ^{Free} ^{plate} ^{do} ^{Roti}
Chara ^{Discoid} ^{Fritschelle} ^{plate} ^{like} ^{Oedogonium}
^{shape} ^{shape}

उत्ति गिर पाली कल

Ulothrix ^{Girdle} ^{shape} ^{Chlamydomonas} ^{Cup} ^{Shape}

Porifera Psycho you bath in freshwater जिवा
 Sycon (Sypa) Euspongia (Bath sponge) Freshwater sponge → Spongilla

Mollusca सपा का ककल लाल Shocked → Aray Apple Juice पीलो
 Sepia (Cuttlefish) Loligo (Squid) Apple Snail Pila

Dentist task समझकर 8 दांतों को चप्पड़ से चाटा सारो or Pink pearl ले लो।
 Dentalium = tooth shell Octopus = Devil fish Chastopleura = Chiton Pinctada = Pearl Oyster

Echinodermata Don Lily ko एक औरत ने Bright offer
 (Antedon = Sea lily) Echinus = Urchin Brittle = Ophiura
 में Star-fish के बटन Cucumber दे दिया
 Asterias Cucumaria

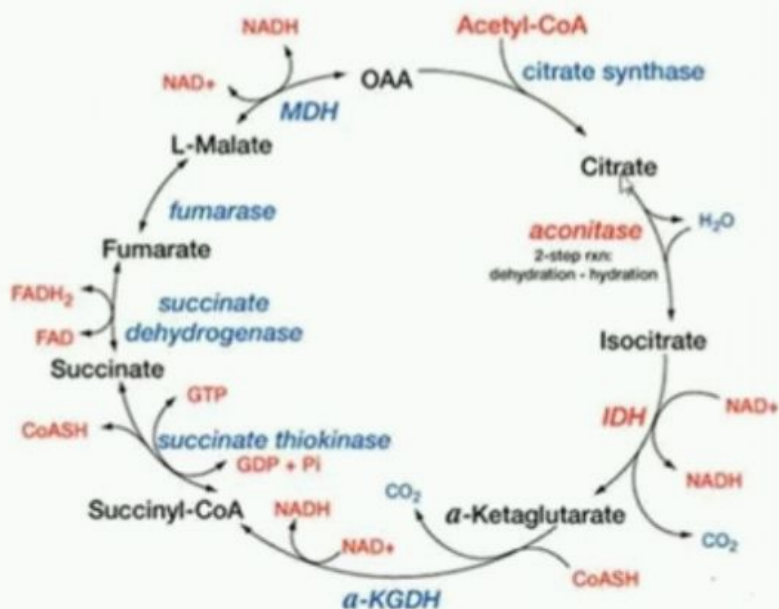
Larval stages of Fasciola (from snail to sheep)

Mira Sports में Ready है, अब शांति नहीं है।
 Miracidium Sporocyst Redia Cercaria Metacercaria

TCA CYCLE – Intermediates of Citric acid cycle

OUR CITY IS KEPT SAFE AND SECURE FROM MOBSTERS

Oxalacetate
Citrate
Isocitrate
Alpha-ketoglutarate
Succinyl-coA
Succinate
Fumarate
Malate



ABC

- Anthrax
- Bacillus
- Clostridium

all reproduce by endospores

CHILDREN LIKE GRANNY SPEAKING GERMAN

Layers of skin STRATUM

- Corneum
- Lucidum
- Granulosum
- Spinosum
- Germinativum/malpighi

CPM

Photorespiration occurs in

- Chloroplast
- Peroxisomes
- Mitochondria

•TANYA AND RIYA NOW ARE PROFESSORS BECAUSE FATHER CHEERED

- Thiamine (vit b1)
- Riboflavin (vit b2)
- Niacin (vit b3)
- Pantothenic acid (vit b5)
- Pyridoxine (vit b6)
- Biotin (vit b7)
- Folic acid (vit b10)
- Cyanocobalmin (vit b12)

NEVER LET MOMMA EAT BEANS

- Neutrophils 60%
- Lymphocytes 30%
- Monocytes 6%
- Eosinophils 3%
- Basophils 1%

COWS OFTEN SIT DOWN CARELESSLY, PERHAPS THEIR JOINTS CRACK, PERSISTENT EARLY OILING MIGHT PREVENT PAINFUL RHEUMATISM

- *Cambrian
- *Ordovician
- *Silurian
- *Devonian
- *Carboniferous
- *Permian
- *Triassic
- *Jurassic

*Cretaceous periods

*Palaeocene

*Eocene

*Oligocene

*Miocene

*Pliocene

*Pleistocene

*Holocene (r

Epochs of
Cenozoic era

GOODNESS

GRACIOUS

FATHER

FRANKLIN

DID

GO

BY

PICKING

PUMPKIN

(TO)

PREPARE

PIES

GLUCOSE

GLUCOSE-6-PHOSPHATE

FRUCTOSE-6-PHOSPHATE

FRUCTOSE-1,6-DIPHOSPHATE

DIHYDROXYACETONE-PHOSPHATE

GLYCERALDEHYDE-PHOSPHATE

1,3-BIPHOSPHOGLYCERATE

3-PHOSPHOGLYCERATE

2-PHOSPHOGLYCERATE

PHOSPHOENOLPYRUVATE [PEP]

PYRUVATE

SHORT TRICKS FOR MINERAL NUTRITION

CHAPTER

Beneficial elements - Si Na Se Co
सीना सेको

Macronutrients - CHOPKNS Ca Mg
चोपकिन्स का मैग्नी

Micronutrients - Mo B Zn Mn Cu Ni Cl Fe
मोइल्लर जान मन रू निक्कल केर

CHLOROSIS (Deficiency of) - Mo N K S Fe Mg Mn Zn
मोइल्लर से किर मंगो मंजूर

Necrosis - Ca K Cu Mg
काके रू मंगो

$Mn \uparrow$ Fe Mg $Ca \downarrow$ (Toxicity)
मनी ज्यादा किर भी मैंगी कम

Critical elements - N K P (National kamina party)
Required for water synthesis - Mn, Zn (मंजूर)

Macronutrients:

Mnemonic / Trick:

P.K. का कौन सा Mug?

P.K. → P (Phosphorous) and potassium (K)

का → Ca (Calcium)

कौन (C, H, O, N) → Carbon, hydrogen, oxygen, nitrogen

सा → S (Sulphur)

Mug → Mg (Magnesium)

Micronutrient

Mnemonic / Trick:

Bhabhi जरा मामाजी को Iron Copper में Cola
देना

Bhabhi → Boron (B)

जरा → Zinc (Zn)

मामाजी → Manganese (Mn)

Iron → Fe

Copper → Cu

में → Molybdenum (Mo)

Cola → Chlorine (Cl)

🔊 TRICKS TO LEARN NCERTs...TABLE 9.2

✓ Cross Varieties Bred By Hybridisation And Selection, FOR INSECT PEST RESISTANCE.....

✓ 1.

"gaurav and brassi are rappers".

Gaurav : pusa gaurav.
(variety)

And : Aphids.(insect pest)

Brassi : brassica (crop)

Rappers : rapeseed mustard.

ADRENAL GLAND AND ITS HORMONES

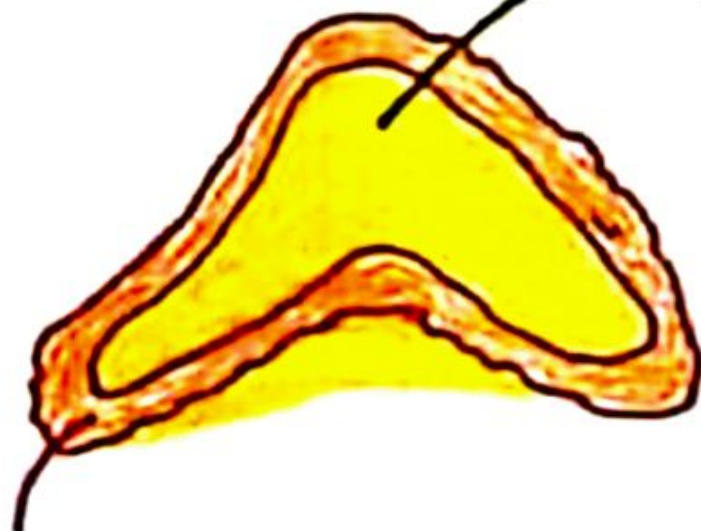
ADRENAL MEDULLA

TRICK = MEN

M = MEDULLA

E = EPINEPHRINE / ADRENALINE

N = NOREPINEPHRINE / NORADRENALINE



ADRENAL CORTX DEVIDED IN 3 LAYERS

ZONA GLOMERULOSA (OUTER)

ZONA FASCICULATA (MIDDLE)

ZONA RETICULARIS (INNER)

TRICK = GO FIND REST & MAKE GOOD SWEET

G = GO

F = FIND

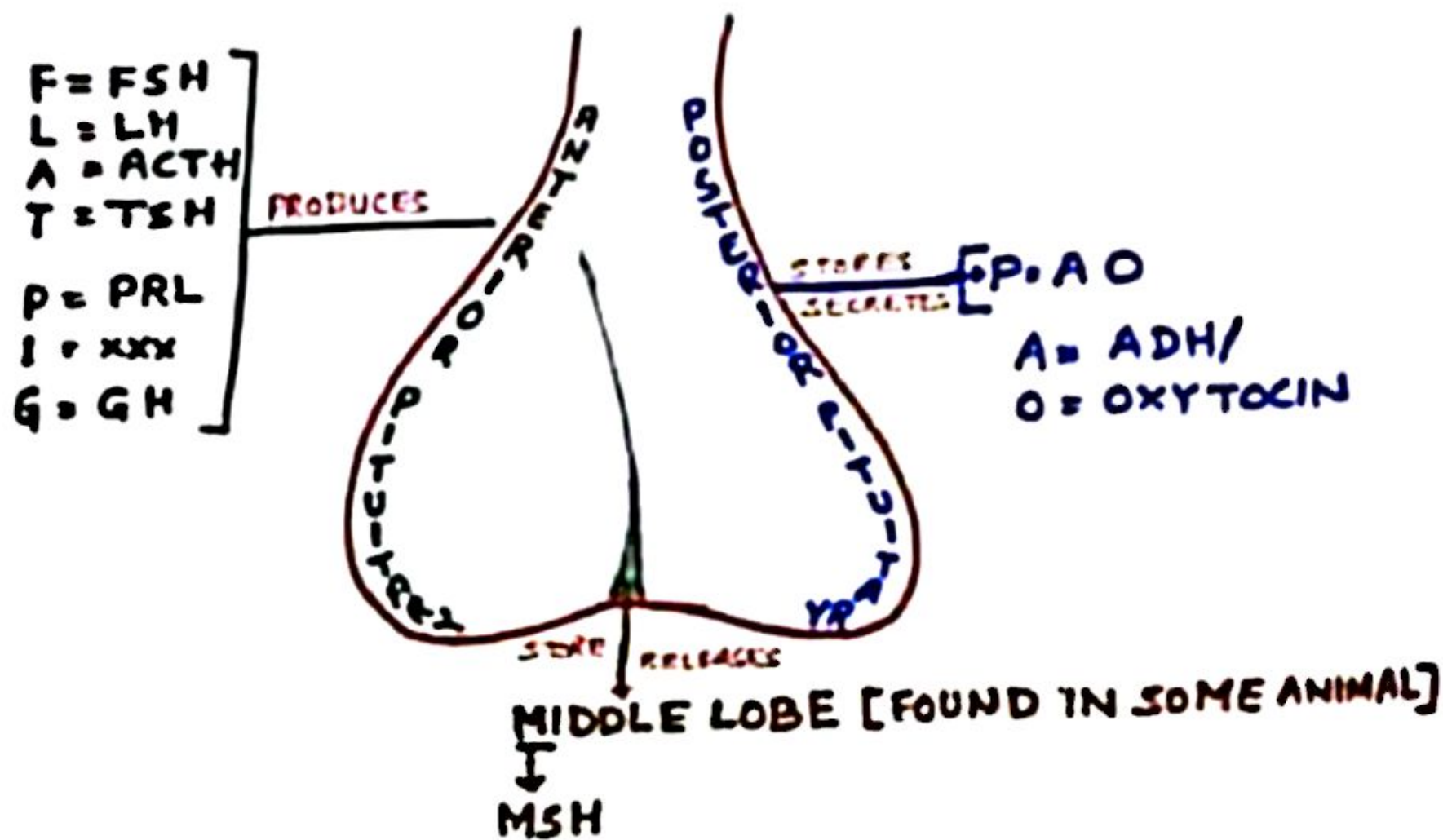
R = REST

MAKE = MINERALOCORTICIDS

GOOD = GLUCOCORTICIDS

SWEET = SEX-STERIODS

PITUITARY GLAND AND ITS HORMONE



ANTERIOR PITUITARY = FLAT PIG
POSTERIOR PITUITARY = PAO (P for posterior)
M for MIDDLE = M for MSH

OVARY AND ITS HORMONE

TRICK = RIPE OVARY

R = RELAXIN

I = INHIBIN

P = PROGESTERONE

E = ESTROGEN

TESTES AND ITS HORMONE

TRICK = TIM

T = TESTOSTERONE

I = INHIBIN

M = MULLERIAN INHIBIN FACTOR

PINEAL GLAND = MELATONIN

THYROID GLAND = THYROXINE

PARATHYROID GLAND = PARATHYROID HORMONE

THYMUS = THYMOSINS

HEART = ANF

KIDNEY = ERYTHROPOIETIN

GIT = GASTRIN, SECRETIN, CCK, GASTRIC INHIBITOR
PEPTIDE (GIP)

HOMOLOGOUS

↓

 H_2^+

Vet erbrate Heart Brain
Virat How is the Bat &
Bougainville Thorn Cuscuta Tendr.
Ball for Test cricket Today
Limbs whale man bat cheetah
Let's win the Match by taking Catch.

Analogous

↓

Au

the Penguin people of Delhin Delhi
 are Sweet Potato Potato
 Sweet & Peaceful. Flippers. Faridabad.

wings Brood Buttry
uho gue Best breads.

Many Octopus Eyes
- Many option of Egg dishes.

known as pseudostairified. long cells, so can be seen as bil

EXAMPLES:-

- (i) Simple Squamous Epithelium:- [ILL BACO]
- Inner wall of heart. (Endocardium) [I]
 - Outer surface of intestine. [O]
 - Bowman's Capsule. [B]
 - Alveoli of Lungs. (Pneumocytes Type I) [A]
 - Covering of Coelom (Mesothelium) [C]
 - Inner lining of blood vessels and lymph vessels (Endothelium). [L]
 - Thin part of Loop of Henle. [L]

(ii) Simple Cuboidal Epithelium:- (VASTID)

- V — Vesicles of Thyroid Gland.
- A — Acini of Pancreas
- S — Sweat Glands
- T — Thick part of Loop of Henle.
- I — Iris, Choroid, Ciliary Body of Eye, etc.
- D — DCT of nephron.

(iii) Simple Columnar Epithelium:- (LUBIS)

- L — Liver
- U — Uterus
- B — Bile Duct
- I — Intestine
- S — Stomach.

Male Reproductive Tract (path of sperm)

"SEVEN UP"

Seminiferous tubules
Epididymis
Vas deferens
Ejaculatory duct
(Nothing)
Urethra
Penis

Menstrual Cycle

"FOL(d) M(a)PS"

Ovarian cycle: Follicular phase, Ovulatory phase, Luteal phase

Menstrual cycle: Menstrual flow, Proliferative phase, Secretory phase

The ovarian cycle controls the menstrual cycle. The cycles begin (day 0) when menstrual flow starts. At day 14, the luteal and secretory phases begin and last until day 28, after which the cycles begin again.

HORMONAL CO-ORDINATION:

Anterior Pituitary Hormones

"FLAGTOP"

F: Follicle Stimulating Hormone

L: Luteinizing Hormone

A: ACTH

G: Growth Hormone

T: Thyroid Stimulating Hormone

O: MSH - melanocyte stimulating hormone

P: Prolactin

FSH in males

directly stimulates spermatogenesis - sperm look like "FISH." In females, FSH obviously stimulates ovarian follicles (which secrete estrogens, which stimulate endometrial proliferation).

LH in males

stimulates androgen secretion so males become "Like Hairy Apes" (LH I I A). Androgens also stimulate spermatogenesis, so LH also indirectly stimulates spermatogenesis. In females, LH stimulates the corpus luteum (which secretes estrogens and progesterone, which stimulate the endometrium).

IMMUNE SYSTEM:

Types of antibodies:

Five major classes: GAMED

IgG

IgM

IgE

IgA

IgD

White Blood Cells

(In order of decreasing numbers.)

"Nobody Likes My Educational Background"

N Neutrophils

L Lymphocytes

M Monocytes

E Eosinophils

B Basophils

CLASSIFICATION:

Sourav Ganguly's Family Ordered Chawal, Dal and Kababs.

S—species, G—genus, F—family, O—order, C—Class, D—division, K—kingdom

Kingdom, Phylum, Class, Order, Family, Genus, Species:

Keep Pots Clean Or Family Gets Sick

Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species:

Dear King Philip Came Over For Grape Soda

CELL DIVISION:

The stages of mitosis: (Interphase, Prophase, Metaphase, Anaphase, Telophase)

I Passed My Awful Tests.

PMAT (pcc-mat)

Prophase, Metaphase, Anaphase, Telophase

Cell Cycle

"Go Sally Go! Make Coffee.

G₁, S, G₂, M, C

Growth phase 1, DNA Synthesis (replication), Growth phase 2, Mitosis, Cytokinesis.

Mitosis

"People Meet And Talk", or

"PMAT"

Prophase, Metaphase, Anaphase, Telophase.

Meiosis

"PMAT x2"

Prophase I, Metaphase I, Anaphase I, Telophase I,

Prophase II, Metaphase II, Anaphase II, Telophase II,

(Note: 4 haploid daughter cells instead of 2 diploid daughter cells)

BIOTECHNOLOGY:

"CUT the PY"

Cytosine, Uracil, and Thiamine are PYrimidines (one-ring structures)

"GAPur"

Guanine and Adenine are PURines (two-ring structures)

"All Tigers Can Growl"

Adenine bonds to Thymine; Cytosine bonds to Guanine

Or, "Pure Silver Taxi"

Purines, A and G, bond to pyrimidines, T and C, respectively

RESPIRATION:

The Krebs Cycle

Can Intelligent Karen Solve Some Foreign Mafia Operations?

The Krebs Cycle: Citrate, Isocitrate, Ketoglutarate, Succinyl, Succinate, Fumarate, Malate, Oxaloacetate.

Functions of the Kidney

A

- Acid-Base Balance

→ Reabsorb bicarbonate from urine. Excrete hydrogen ions into urine.

W

- Water Removal

E

- Erythropoiesis

→ The process which produces red blood cells (erythrocytes).

T

- Toxin Removal

B

- Blood Pressure Control

E

- Electrolyte Balance

→ Filter electrolytes and water from blood excreting excess in urine.

D

- Vitamin D Activation

→ Requires enzymatic conversion (hydroxylation)

Animal husbandry
(Cattles → cows & buffaloes).

- 1) CBI (cow → Bos Indicus)
- 2) BBB(B³) (Buffaloes → Bubalus bubalis)

* Helps in
ATM Me Many (Money) Le Gay

A → Agriculture
T → Transport
M → Manure

Me → Milk

Many → Meat

Le → Leather

Gay → BioGas, Glue, Gelatin.

EXAMPLES OF SYNCARPOUS AND APOCARPOUS

SYNCARPOUS

टॉम मस्टी में confuse हुआ सिंगापुर जा कर



Tomato Mustard

Fused

SYNCARPOUS

Michal आपकी कार में फ्री में लोटस और गुलाब सजा दें



Michelle Apocarpous Free Lotus Rose

Mendelian disorders - हम circus से कलर फुल थाली लाये

हम Haemophilia,

circus \longrightarrow Cystic fibrosis

से \longrightarrow Sickle-cell anaemia

कलर \longrightarrow Colour blindness

फुल \longrightarrow Phenylketonuria

थाली \longrightarrow Thalesemia

लाये

Kids- Kingdom

Plays- Phylum/ Division

Cricket -Class

On- Order

Fine- Family

Green- Genus

Surface- Species

SICKLE CELL ANAEMIA

बेटा ग्लोबून्, गोली वाली मार देंगे रिवाल्वर में 6 गोली हैं

बेटा ग्लोबून् → Beta Globin chain

गोली → Glutamine

वाली → Valine

मार देंगे

रिवाल्वर में 6 गोली हैं → Sixth Position

Figure 5.15 से समझो की beta globin chain में sixth position वाला amino acid, Glutamine से Valine में convert हो जायेगा

tricks to remember meiosis

1(prophase)Phases

LATAKTE ZULFON PE DIVANI DUNIA

LATAKTE - LEPTOTIN

ZULFON - ZYGOTIN

PE -PECHYTIN

DIVANI- DIPLLOTIN

DUNIYA- DIAKINESIS

Bryophyta

Mnemonic - Bruce li is game master.

| | | |
|--------------------|----|---------------------------|
| Bruce | -- | Bryophyta |
| Li | -- | Liverworts |
| <u>game</u> | -- | <u>gametophyte</u> |
| master | -- | mosses |