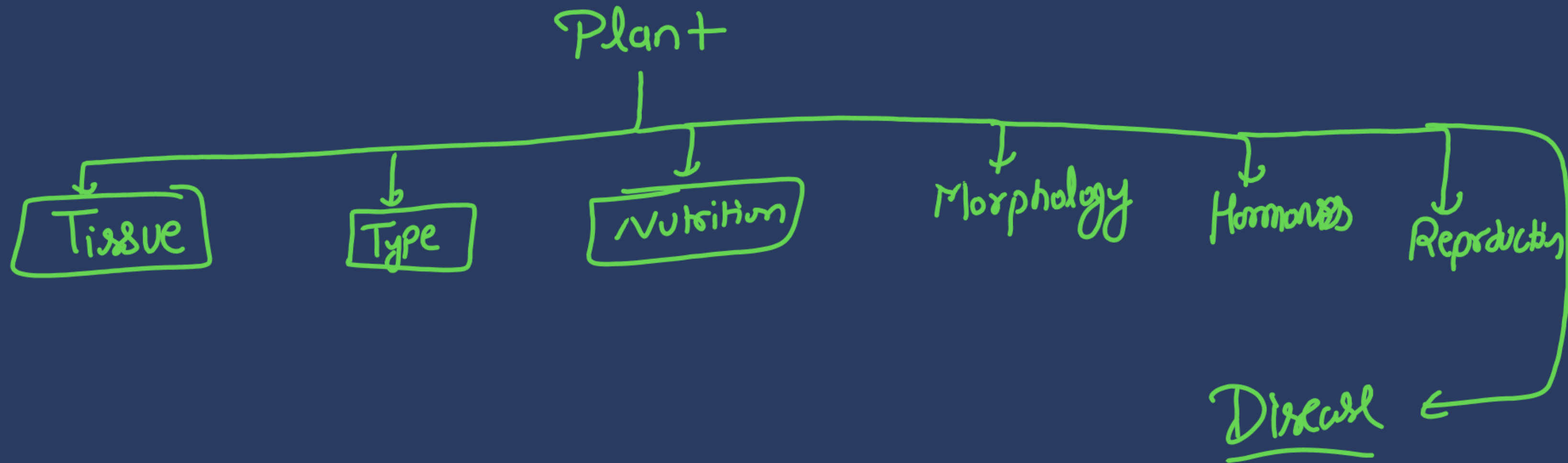




Morphology (आकारिकी)



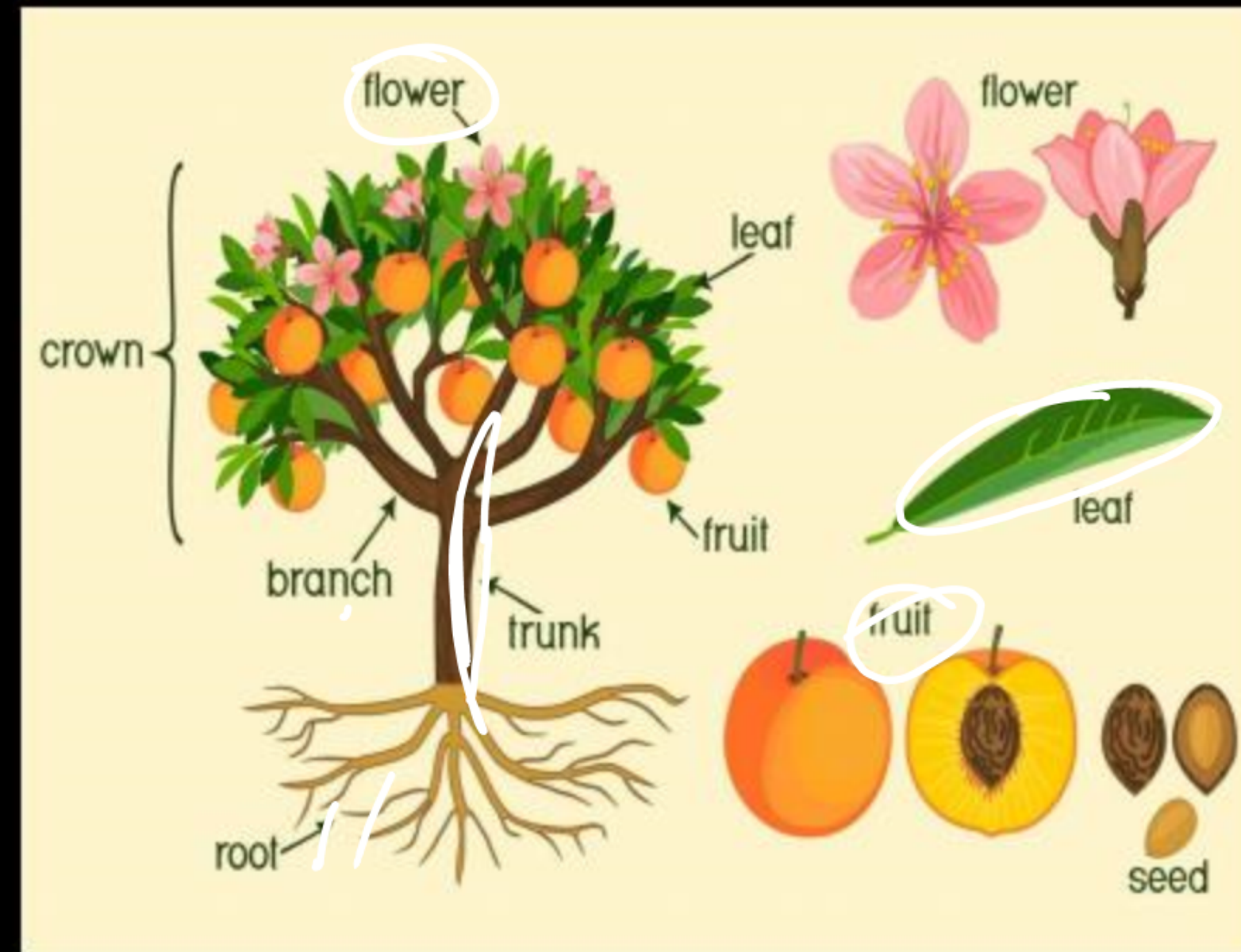
Study of Outer Structure

Root, Stem, Leaf, Flower, Fruit, Seed



GENERAL SCIENCE

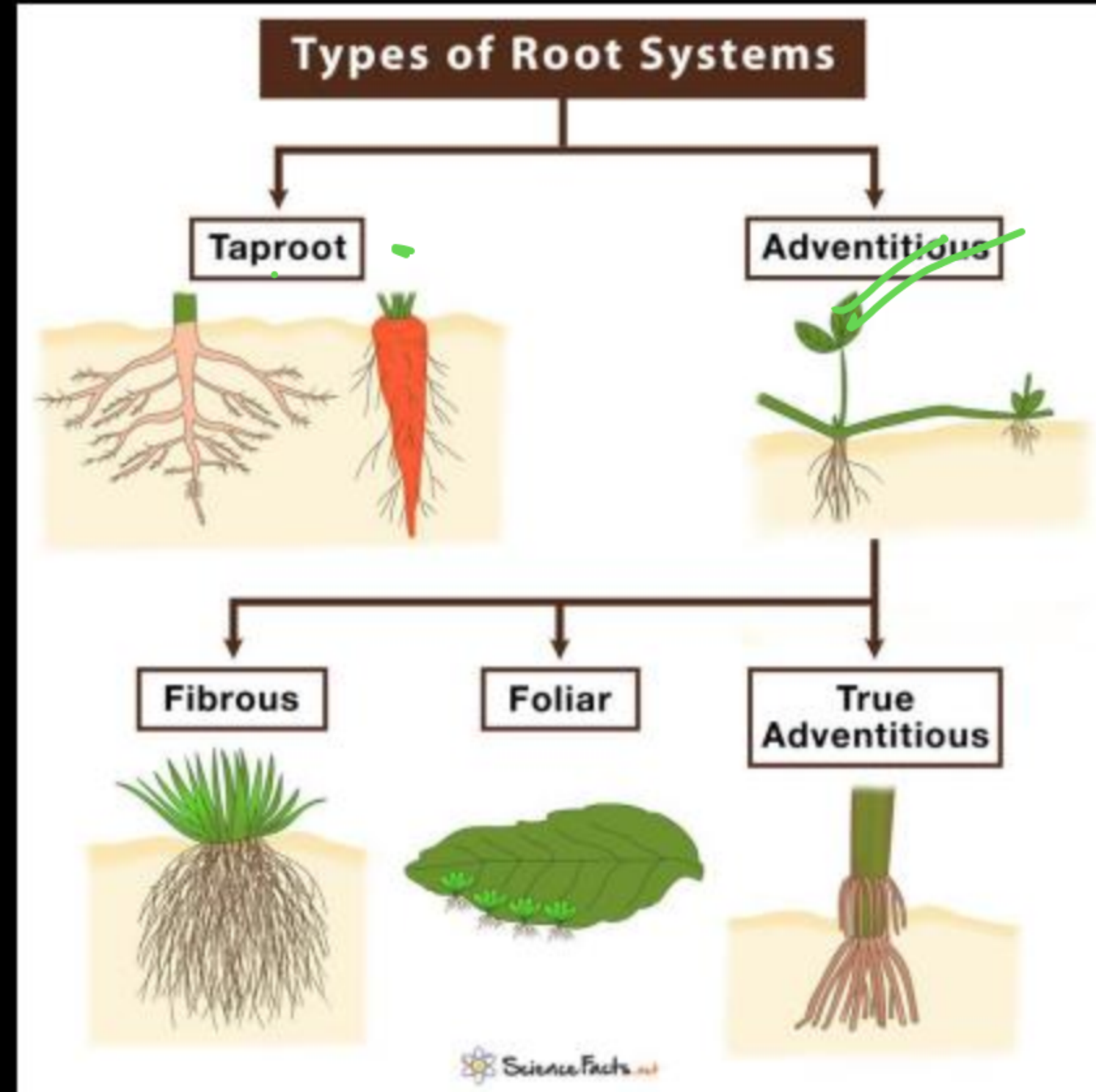
-: Plant Morphology :-



GENERAL SCIENCE

Root :-

- पौधो → Mechanical Support
- Absorption of water and minerals from soil
- Soil Erosion - रोकती है।
- Food Store
- Respiration ✓



⇒ Carrot
↳ Conical

⇒ Radish
↳ Napiform

⇒ Beet Root + Shalgum + Arvi
↳ Fusiform



GENERAL SCIENCE

Stem :-

- Mechanical Support
- xylem & Phloem → ✓✓
- Woody Part

Potato

↓
Stem Tuber

Onion + Garlic

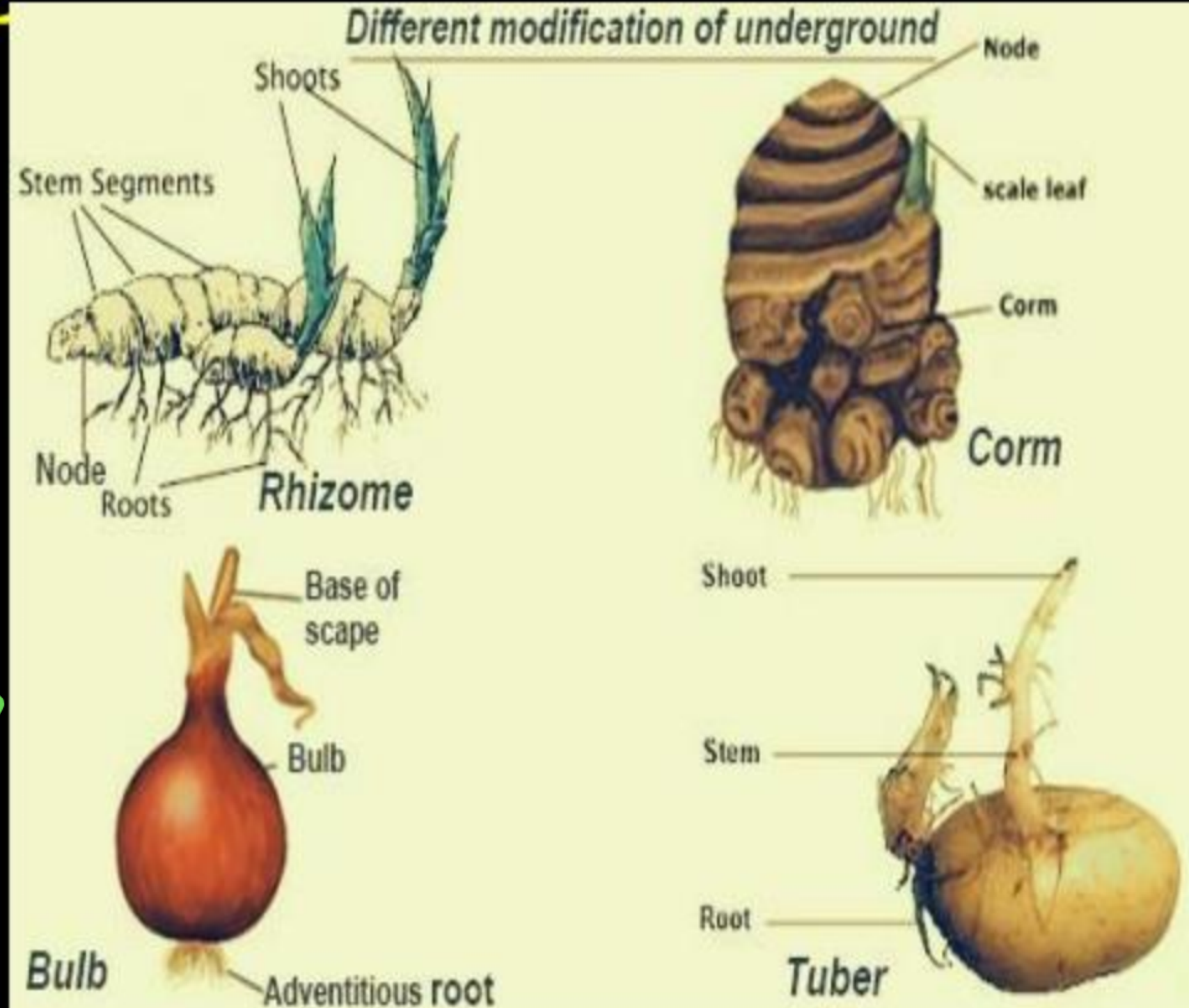
↓
Bulb

Ginger
+
Turmeric

↓
Rhizome

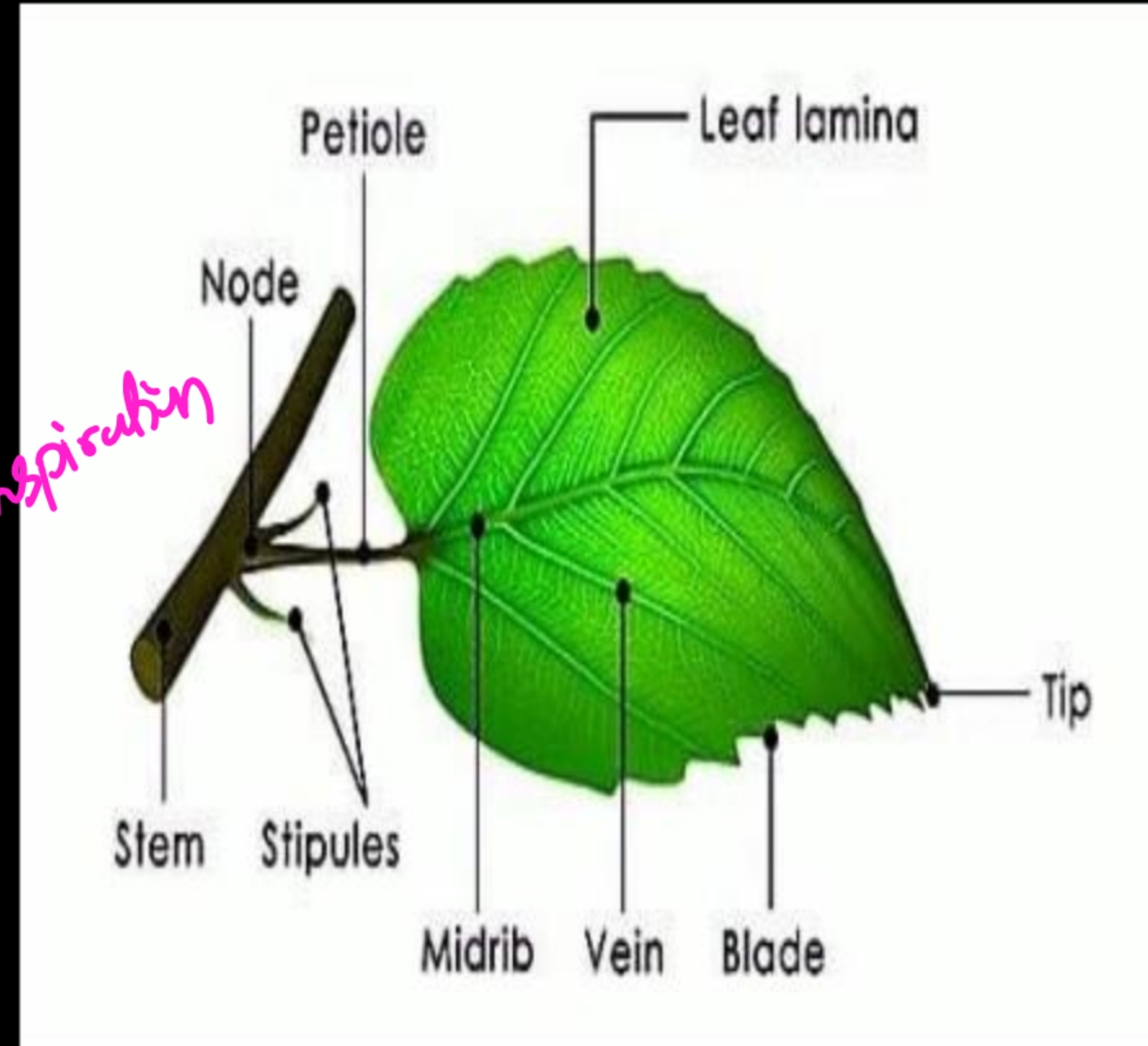
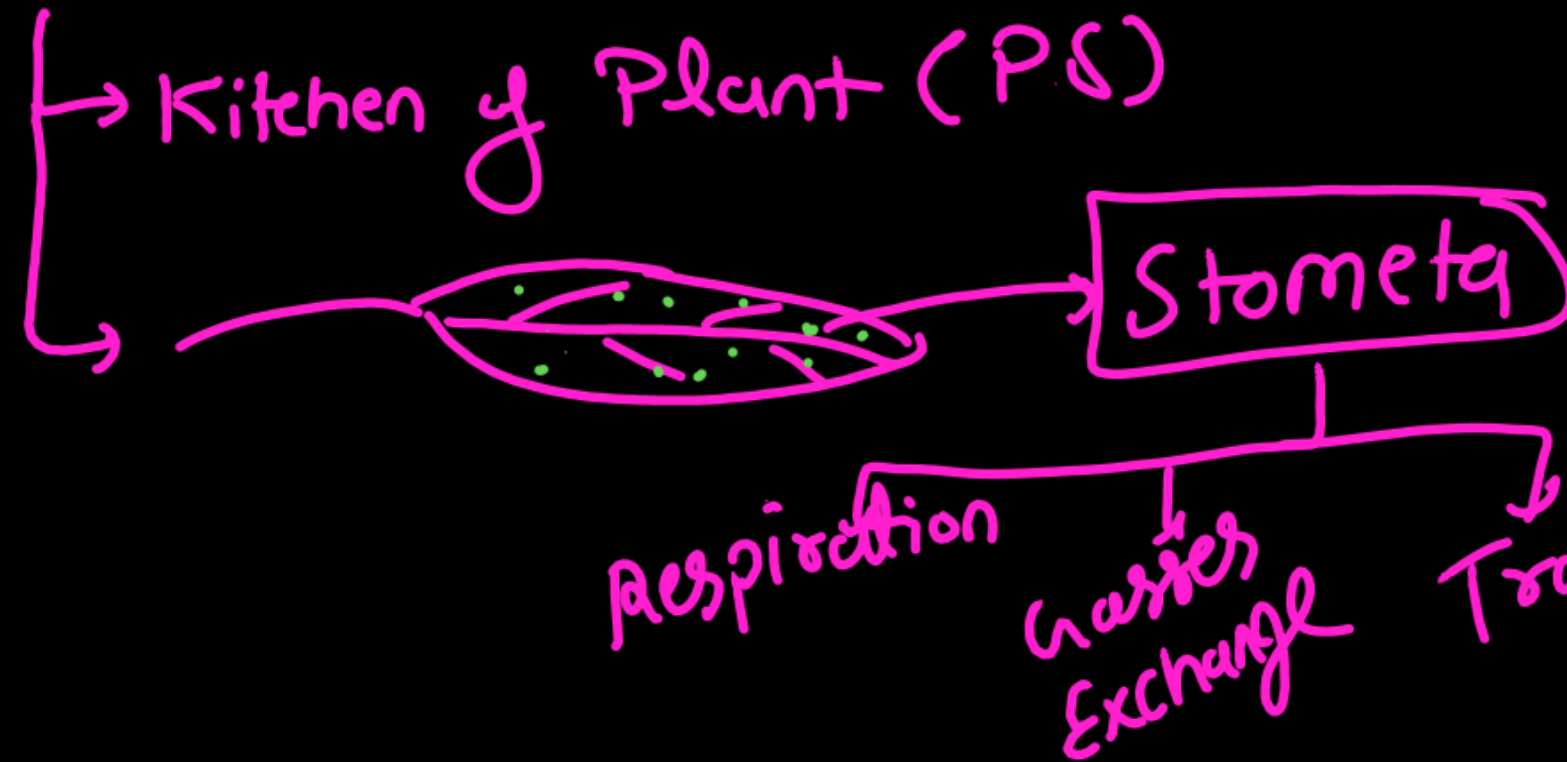
Gimikand ⇒

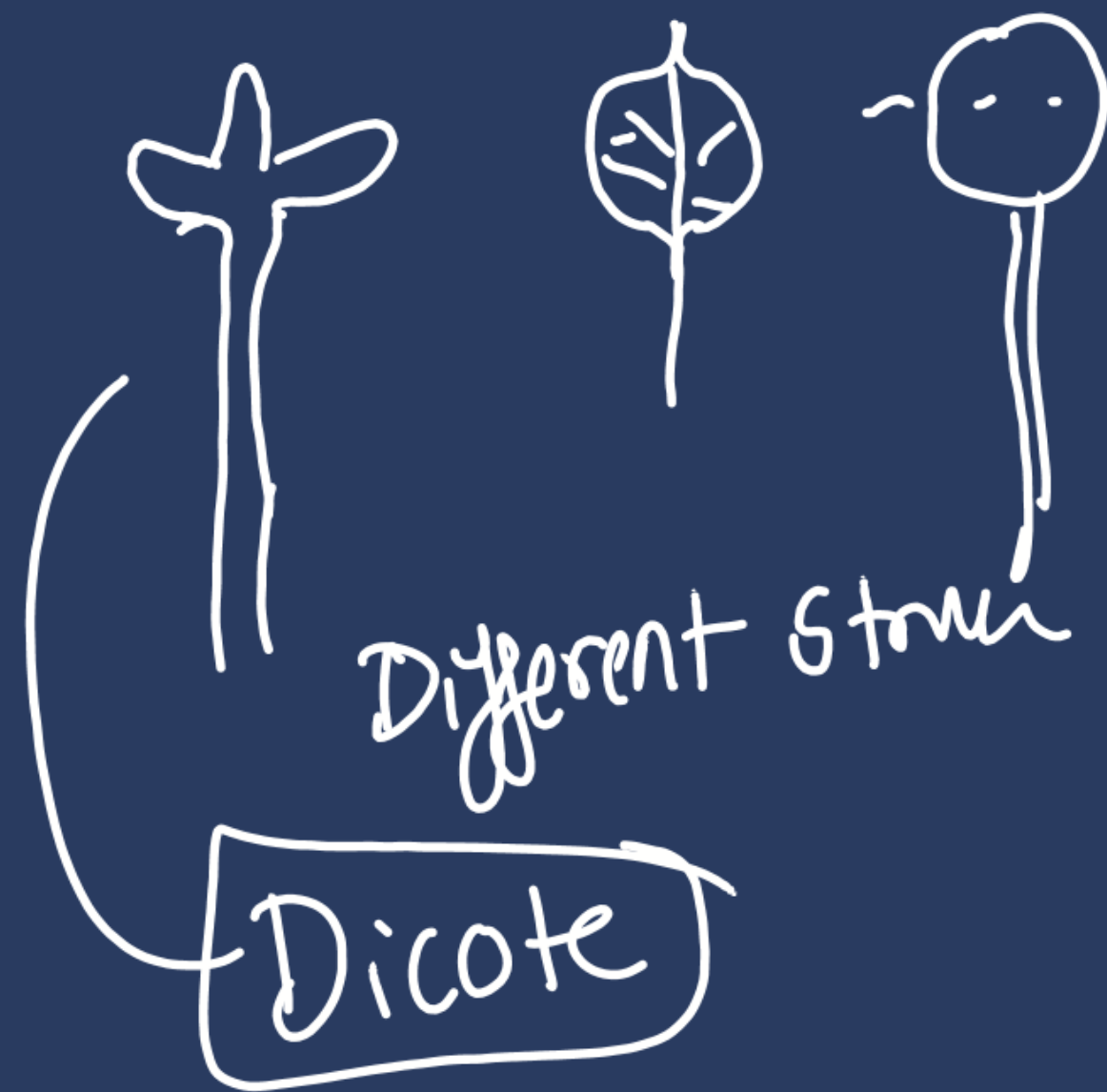
corm



GENERAL SCIENCE

Leaf :-





GENERAL SCIENCE

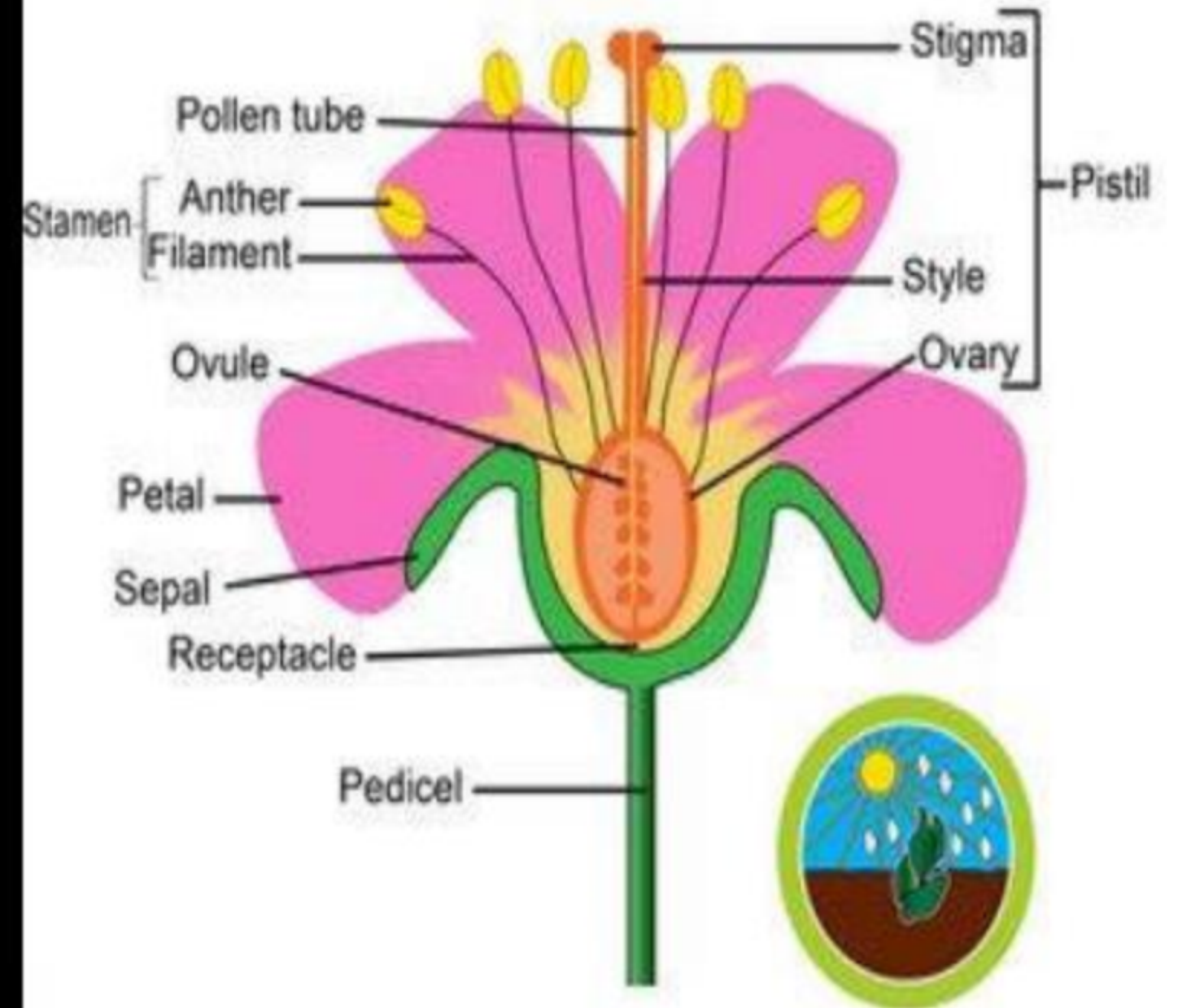
Flower :-

Reproduction

Cauliflower

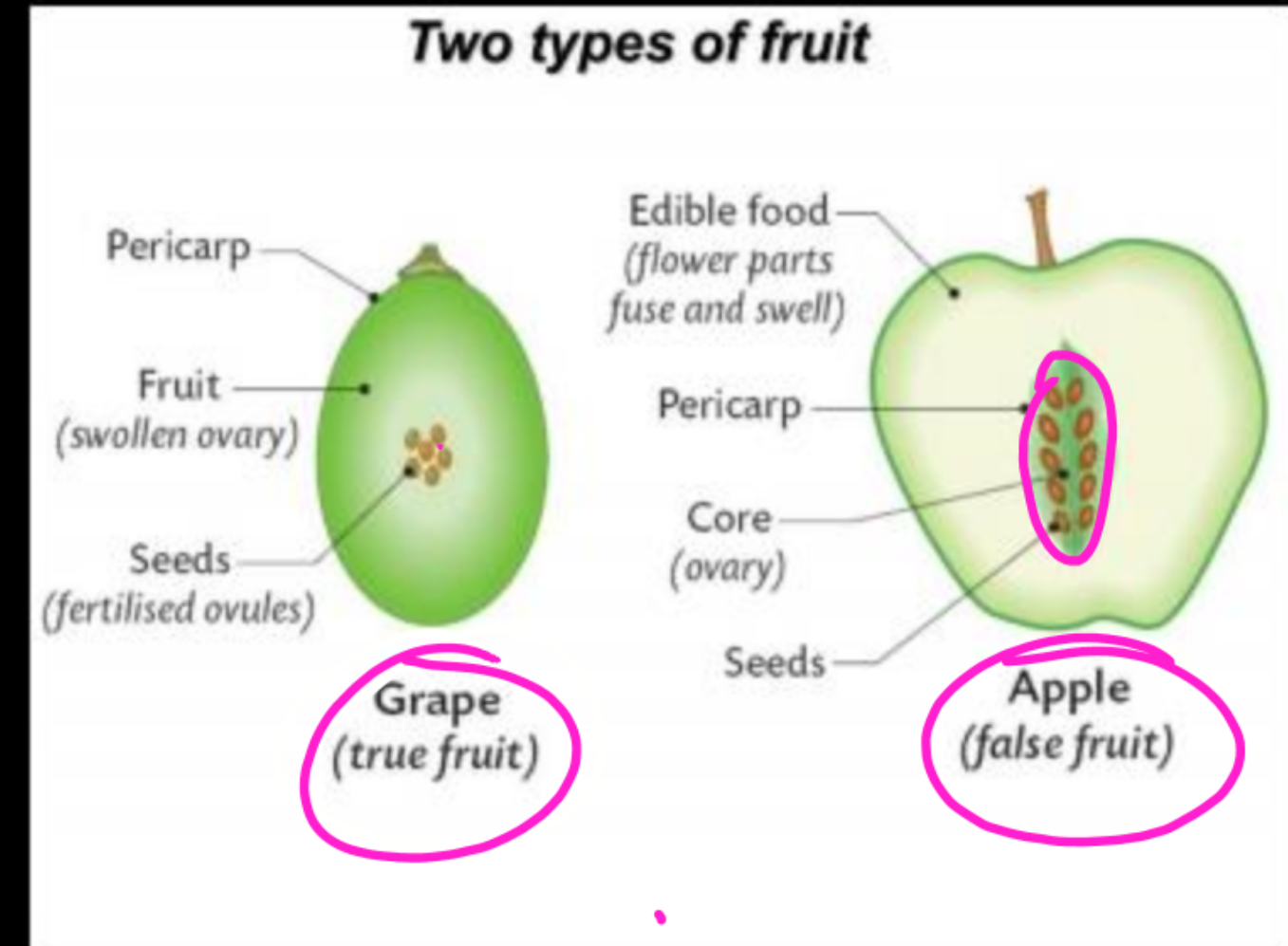
Lung

PARTS OF A FLOWER



GENERAL SCIENCE

Fruits :-

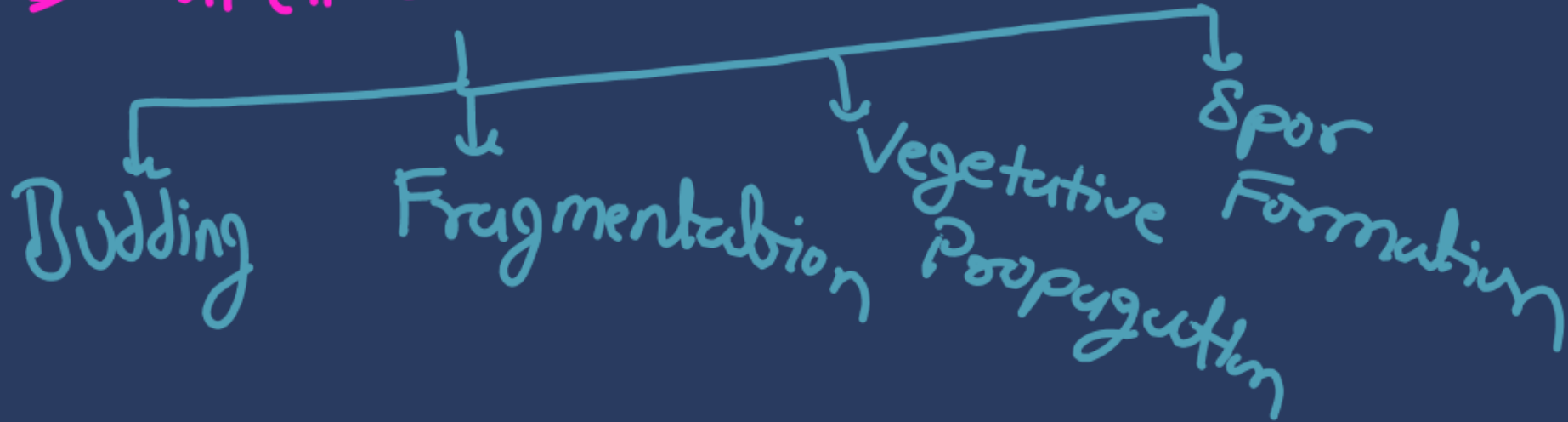


Plant Reproduction

Asexual

⇒ Stem, Root, Leafs

⇒ $2n$ or $2n^+$ or $2n^-$



Sexual

⇒ Seed

⇒ $2n^+$ and $2n^-$

Insects

Pollination

male Gamete
an

Female
part
anther
ovary

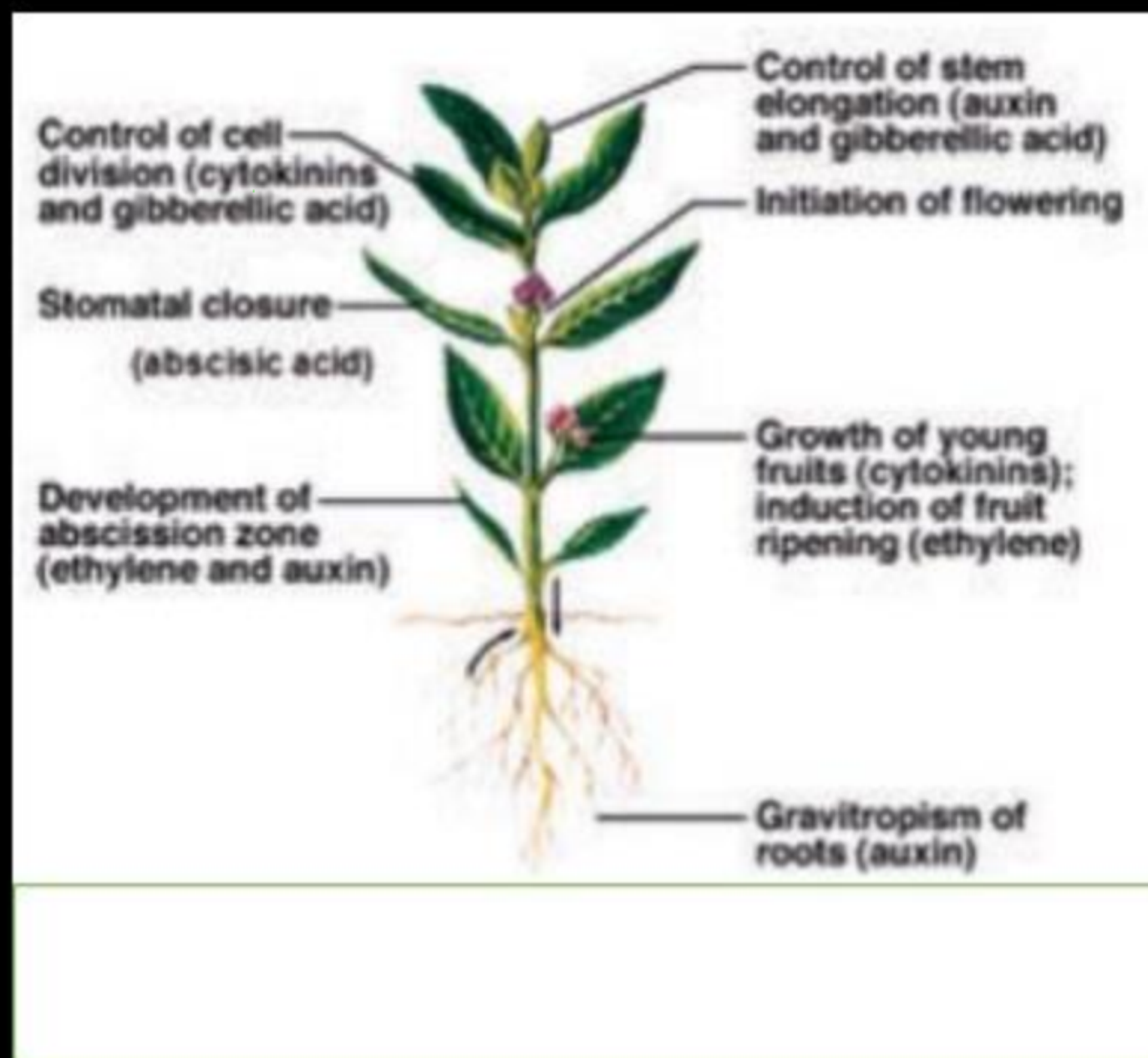


- Sepal ⇒ हरे रंग, मल्लोरोफिल, मूलोरोफिल
 - ↳ Group of Sepal = Calyx
- Petal → Different type of colour + सुगंध
 - ↳ (रंग) / सुगंध → Group of Petals = Corolla
- Stamen = male +
 - ↳ Anther, Pollengrain, Filament
- ↳ Pistil = Female
 - ↳ stigma, Style, Ovary
 - ovule
 - Germinal
 - Zygote
 - ↳ Embryo

GENERAL

SCIENCE

• Plant Hormones :-



Plant Hormones

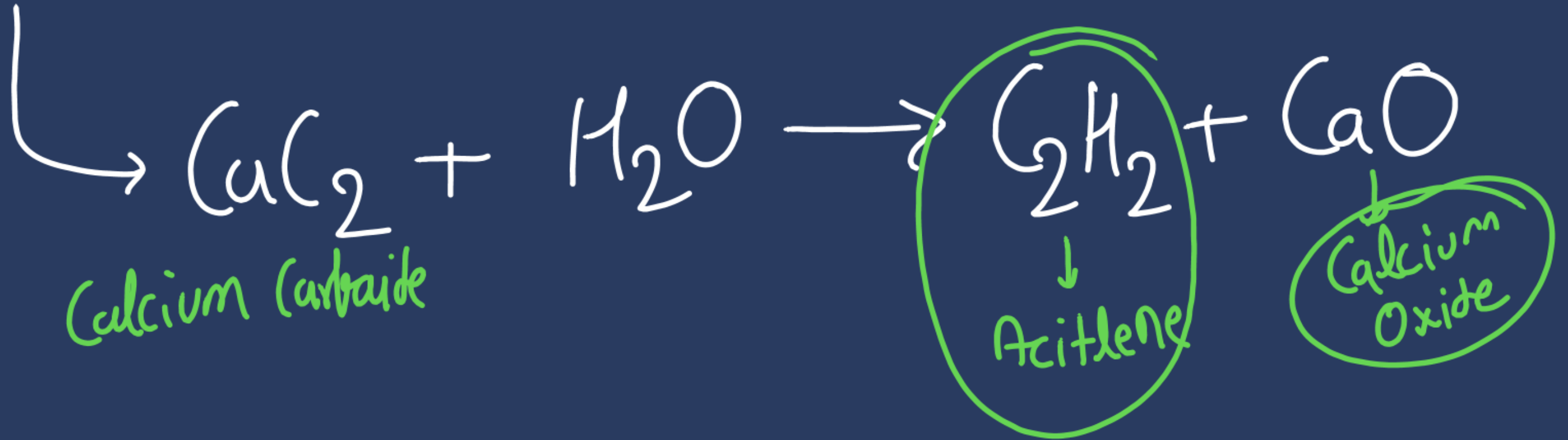
Growth = ++

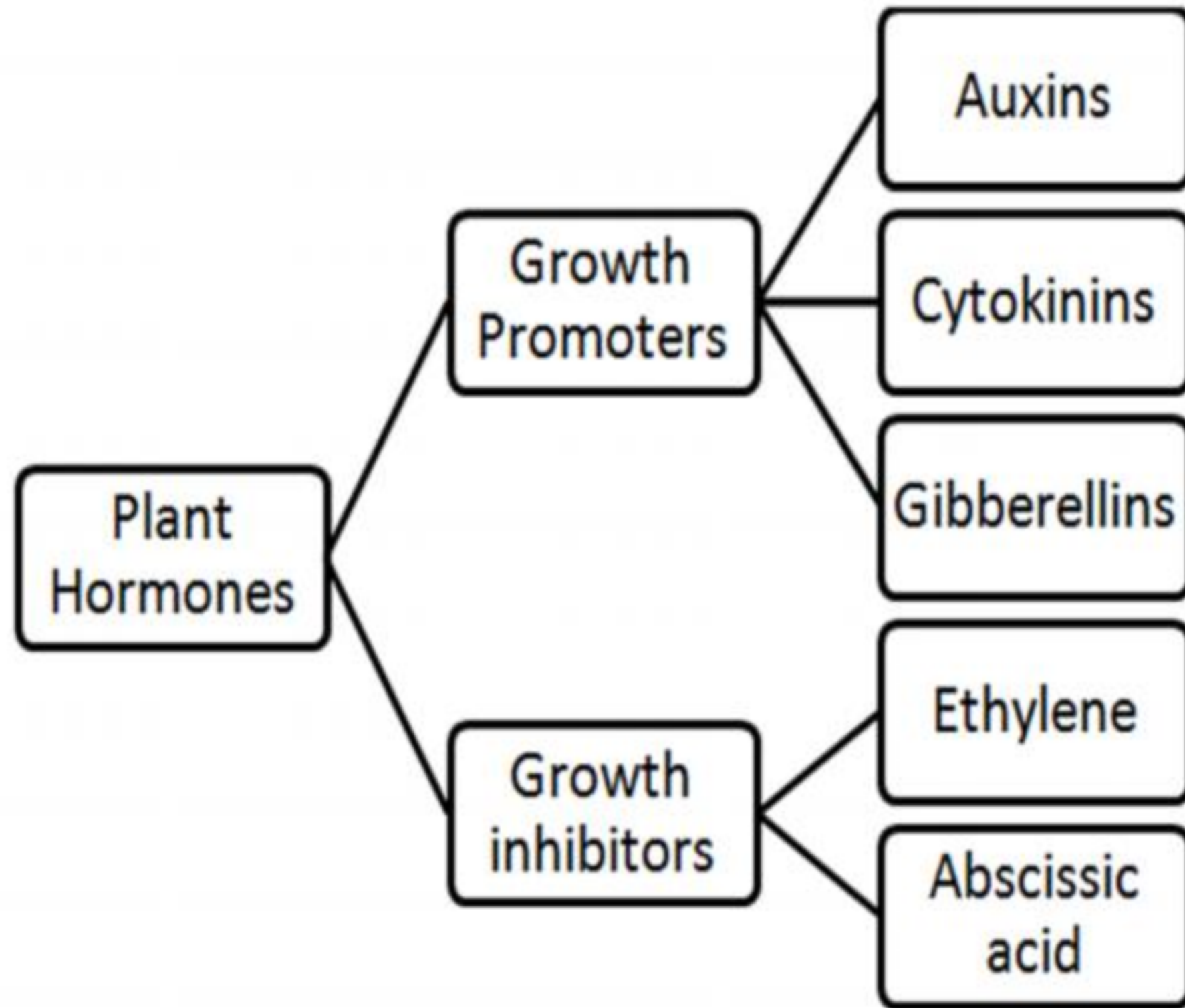
1. Auxin $\Rightarrow$ Growth + Development
 $\hookrightarrow$ Indole-3-Acetic Acid
2. Gibberellin $\Rightarrow$ Woody Part
3. Traumatin = Injuries
4. Florigence $\Rightarrow$ Flowering
5. Cytokinin $\Rightarrow$ Cell Division Control

Growth = xx

1. Abscissic acid
 $\hookrightarrow$ Limit
2. Ethylene
 $\hookrightarrow$ Ripening of Fruits (Nutrient)
Crosses Stage

Artificial





GENERAL SCIENCE

• Plant Diseases :-



Tobacco mosaic virus



Cauliflower mosaic virus



Barley yellow dwarf



Bud blight



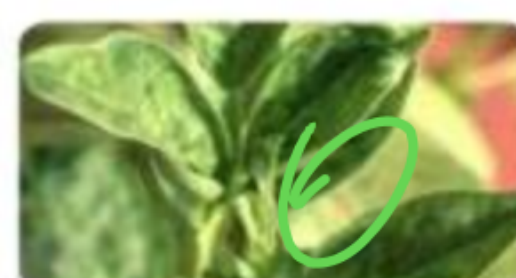
Sugarcane mosaic virus



Lettuce mosaic virus



Maize mosaic virus



Peanut stunt virus



Leaf curl virus

➤ Viral Diseases in Plant :-

- Mosaic disease in Tobacco
- Bunchy top of Banana
- Yellow Vein Mosaic of Bhindi
- Stunt of Groundnut
- Tungro of Paddy

➤ Bacterial Diseases in Plant :-

- Wilt of Potato
- Black Arm of Cotton
- Citrus Canker — Lemon

➤ Fungal Diseases in Plant :- (maximum)

- Tunga Diseases of wheat
- White Rot of Bajra
- Early Blight , Late Blight & Wart Rot of Potatoes
- Tikka of Groundnut
- Red Rot of Sugarcane
- Wilting of Arhar and Mustard
- Argat , Karnal Bunt and smut of Wheat

Zn (Zinc)

White bud of Maize , Khaira of Paddy
, Little leaf of mango + Brinjal

Cu (Copper)

Dieback
Little leaf and of lemon ,

Miniral

Potassium

Burning of leaf of litchi

Boran

Browning of Cauliflower
Hort Rot of Cucumber
Microsis of Amla

