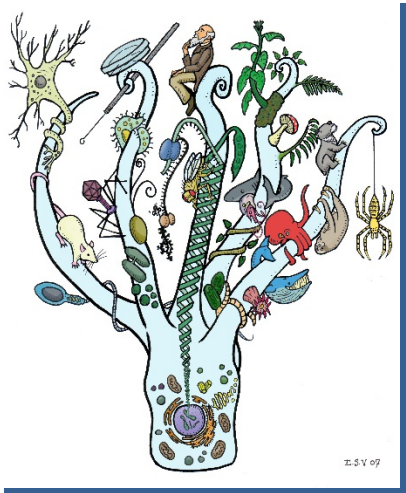


Thursday, Feb 15, 2018

Pick up: Processes WS

Today you will:

1. Describe how the different parts of a plant are involved in Photosynthesis, Cell Respiration, Transpiration & Reproduction

Homework/Planner:

Complete process for homework if necessary

Study for Quiz on Plants & Processes-Tuesday

Plant Processes

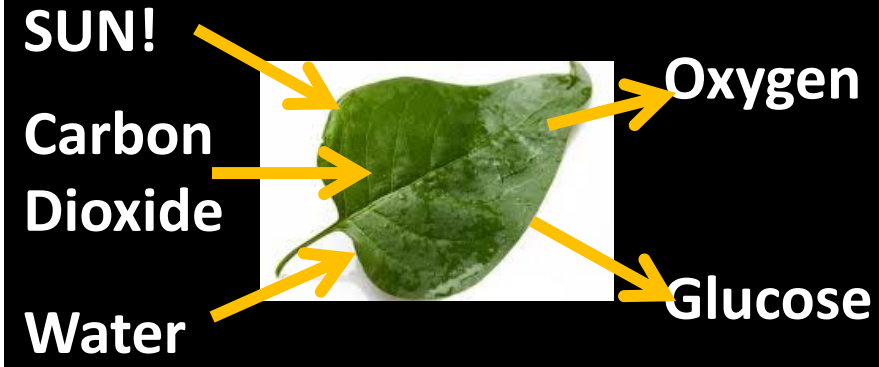
1. **Photosynthesis** = process of using sunlight, CO_2, & water to make glucose & O_2 (Ch. 4.2)
2. **Cellular Respiration** = process of using glucose/food & O_2 to release energy (ATP) (Ch. 4.4)
3. **Transpiration** = process of water absorption, movement, & release through stomata to the atmosphere so the 2 processes above can take place! (Ch. 21.2)
4. **Reproduction** = process of making more plants by way of flowers or cones (Ch. 22.2)

- Write the role each part plays in the process for each column.

PHOTOSYNTHESIS

$6CO_2 + 6H_2O + \text{energy} \rightarrow C_6H_{12}O_6 + 6O_2$

energy in

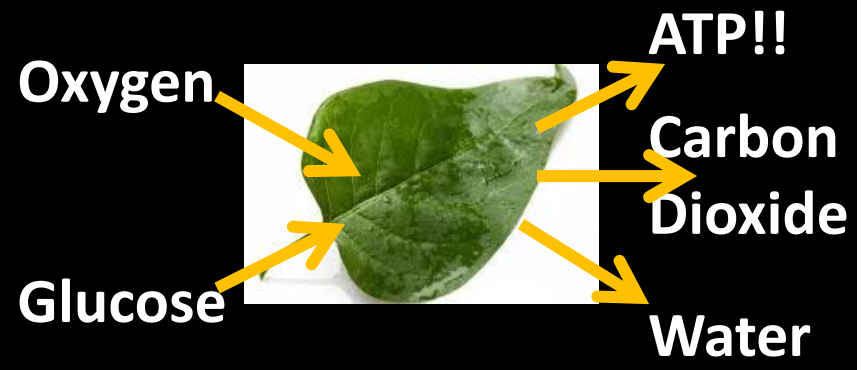


A. Leaves…
B. Stomata…opening to take in CO2 & release O2
C. Guard Cells… control opening of stomate
D. Stem… transport
E. Phloem… tissue inside stem that moves food up AND down

CELL RESPIRATION

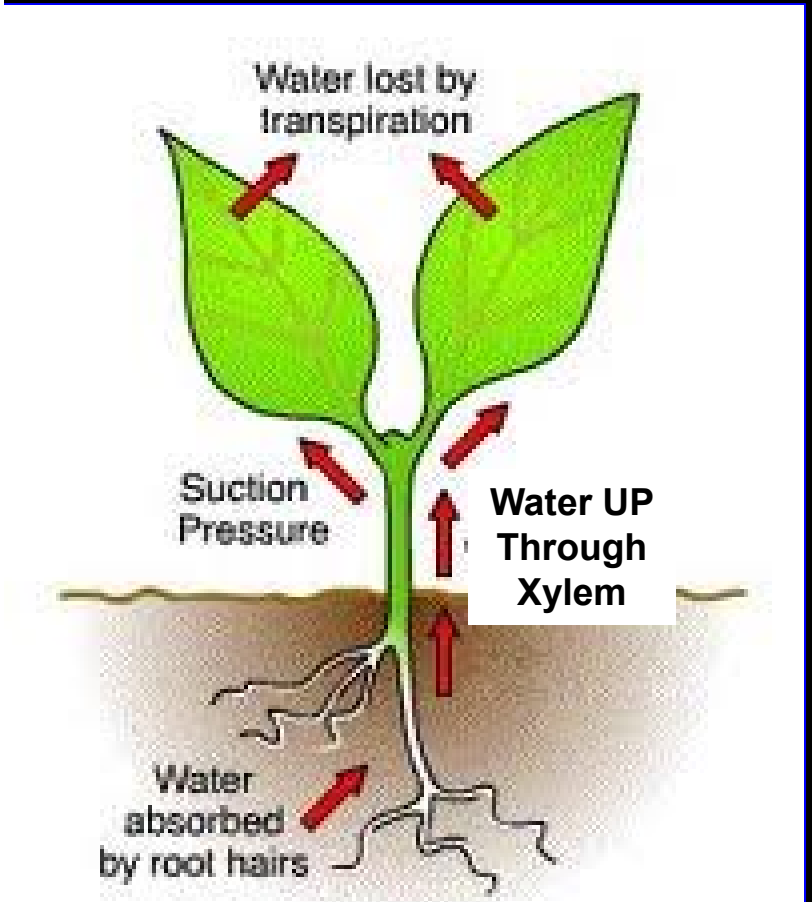
$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + \text{energy}$

energy out

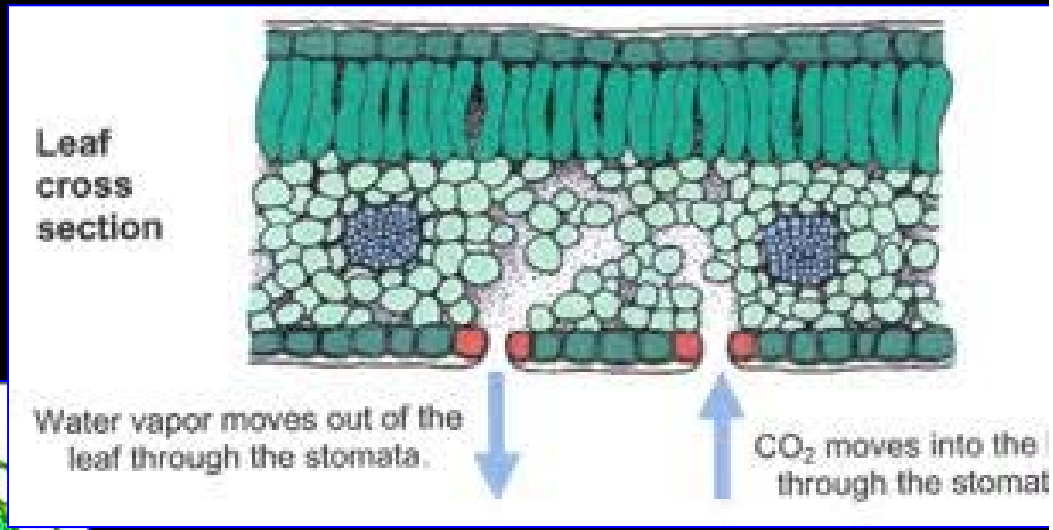


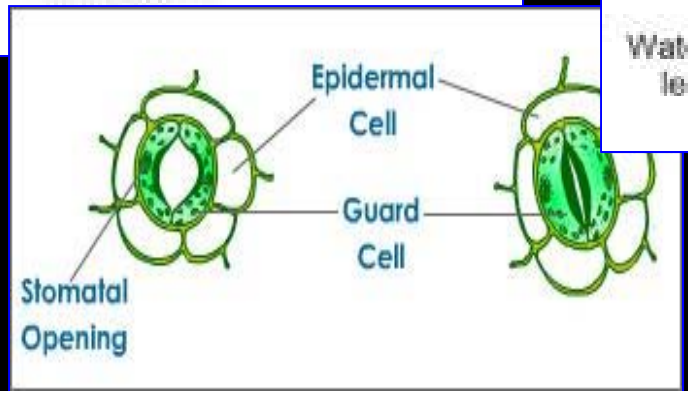
A. Leaves…
B. Stomata… takes in O2 & release CO2
C. Guard Cells…control
D. Stem…transports

TRANSPIRATION

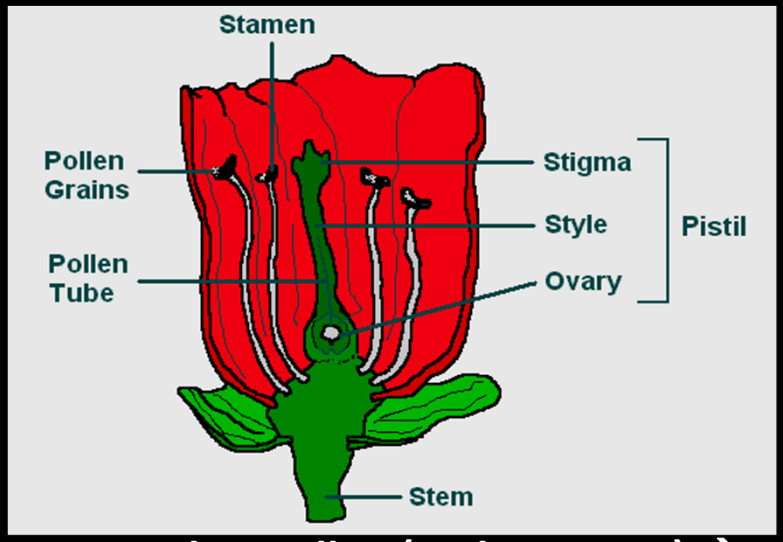


A. Leaves…where water leaves
B. Stomata…opening
C. Guard Cells…control
D. Xylem…tissue that moves water UP only
E. Roots…where water enters





REPRODUCTION



Stamen makes pollen (male gamete) → pollen transferred to Pistil → Fertilized egg moves down to ovary → dev.into fruit → where seeds are

Male cone releases pollen → lands on female cone → seed develops in cone but exposed when cone is open → takes 2 years!

A. Flower… Repro. Part of Angiosperms
B. Stamen… male; prod. pollen
C. Pistil… female; receives pollen
D. Fruit… mature ovary
E. Cone… repro. Part of Gymnosperm
F. Seeds… new plants grow from
G. Meristem… site of new growth
H. Cambium… site of growth in stem between xylem & phloem