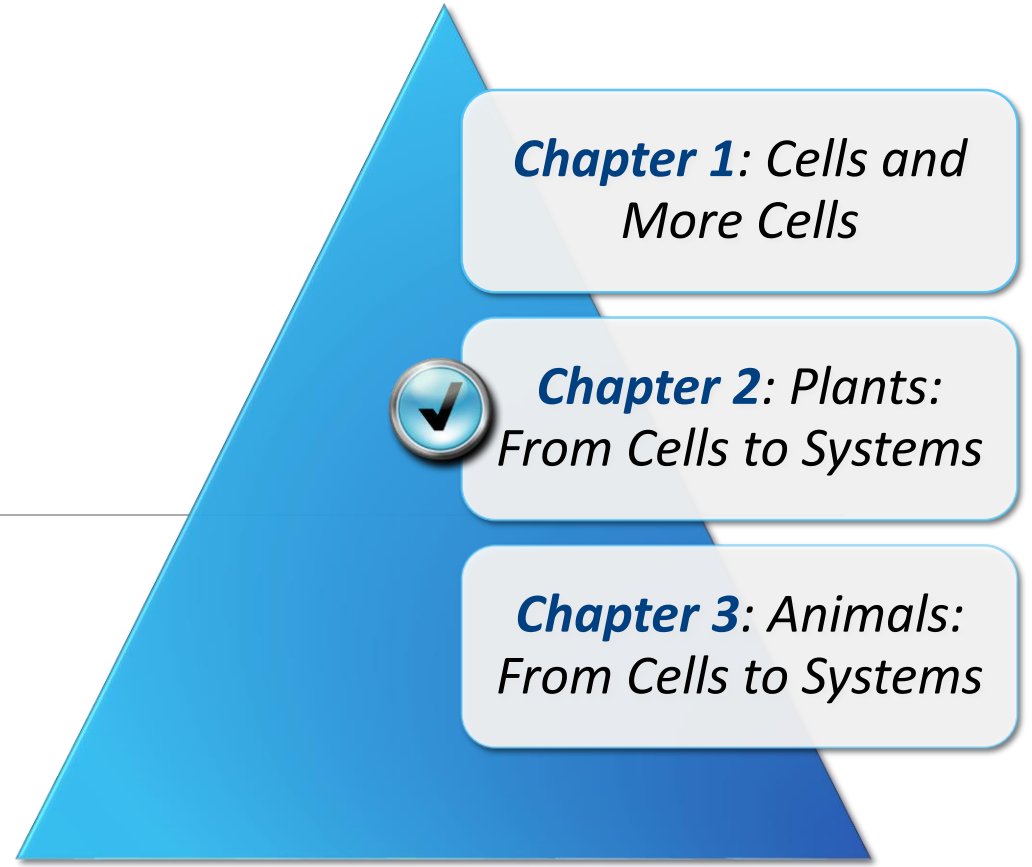
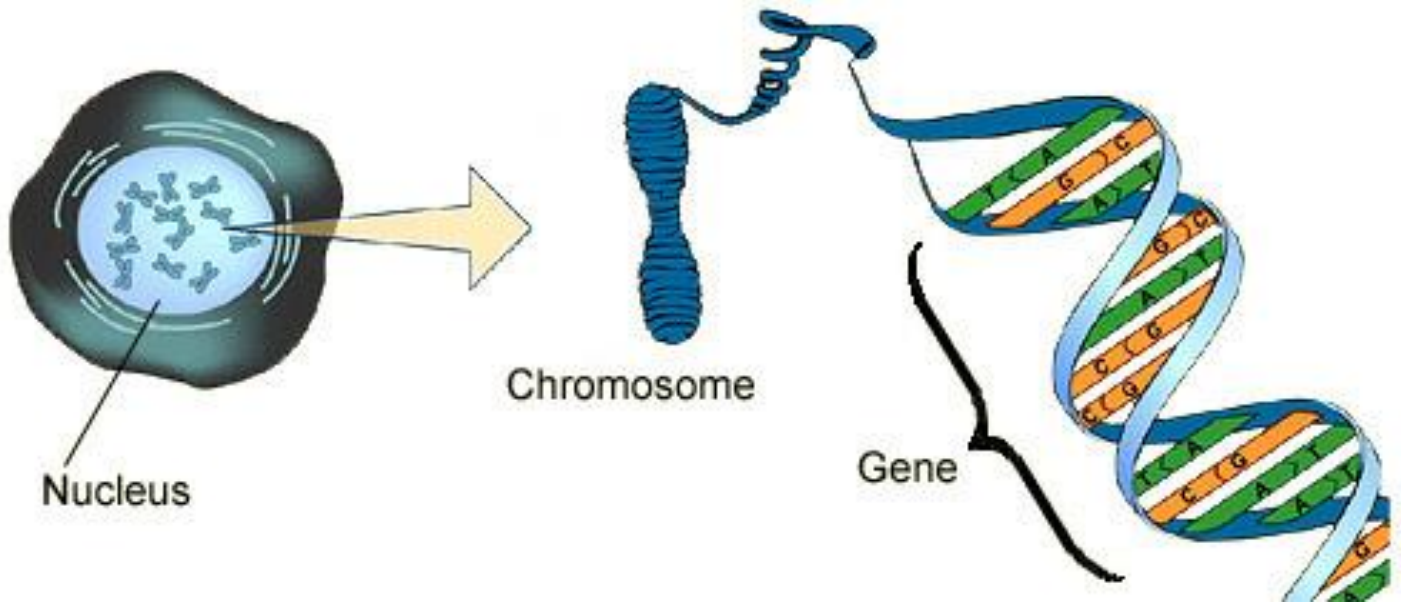
Section 2.1 Plant Cells

SNC2DP

MRS. FRANKLIN



Cell Specialization



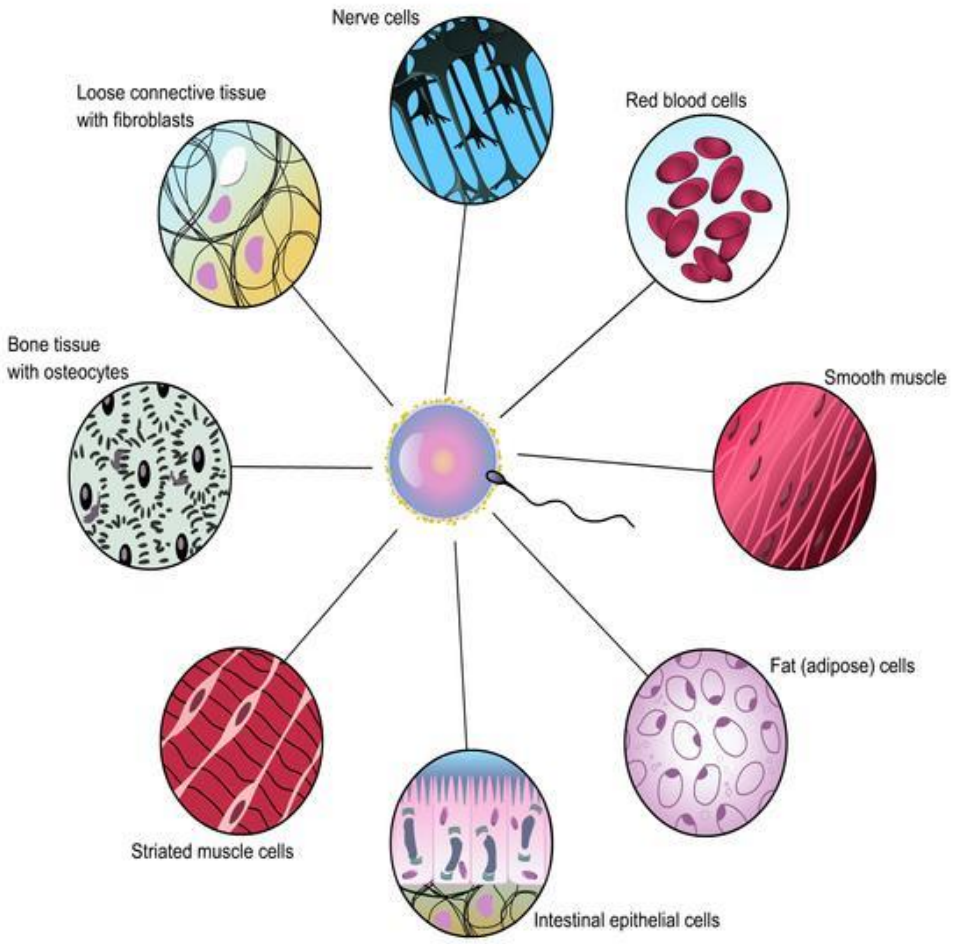
*Cells specialize as a result of producing different **proteins.***

*Different **genes** code for different proteins.*

Cell Specialization

Cell Specialization:

Cell Differentiation:



Remember . . .

Tissue:

Organ:

** All organs in an organism must work together to ensure proper functioning of the organism. Similar to humans, plants also have a variety of tissues and organs that work together to ensure growth and survival of the plant.*

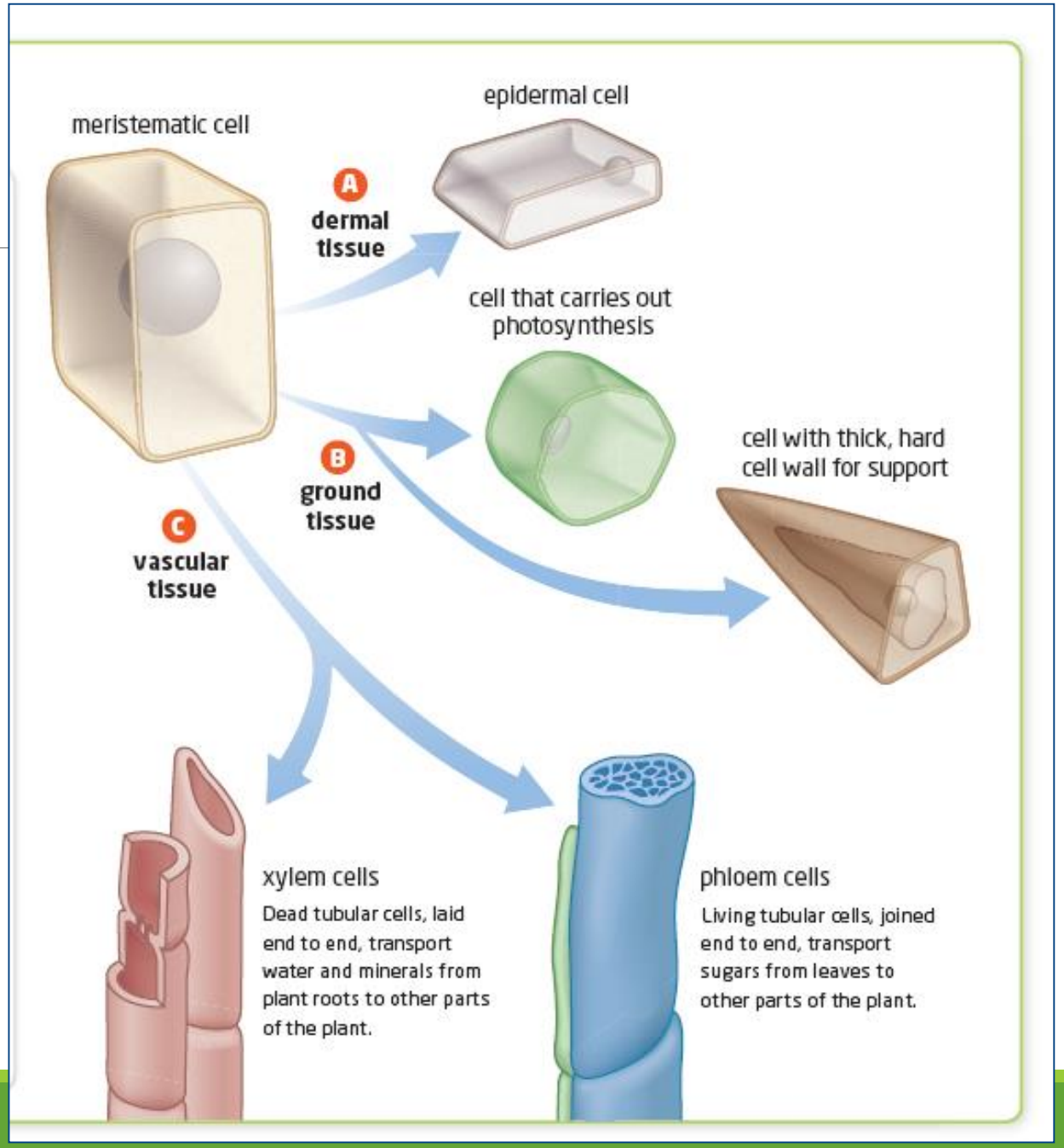
Meristematic Cells

Meristematic Cell – an unspecialized plant cell that gives rise to a specific specialized cell

Dermal Tissue:

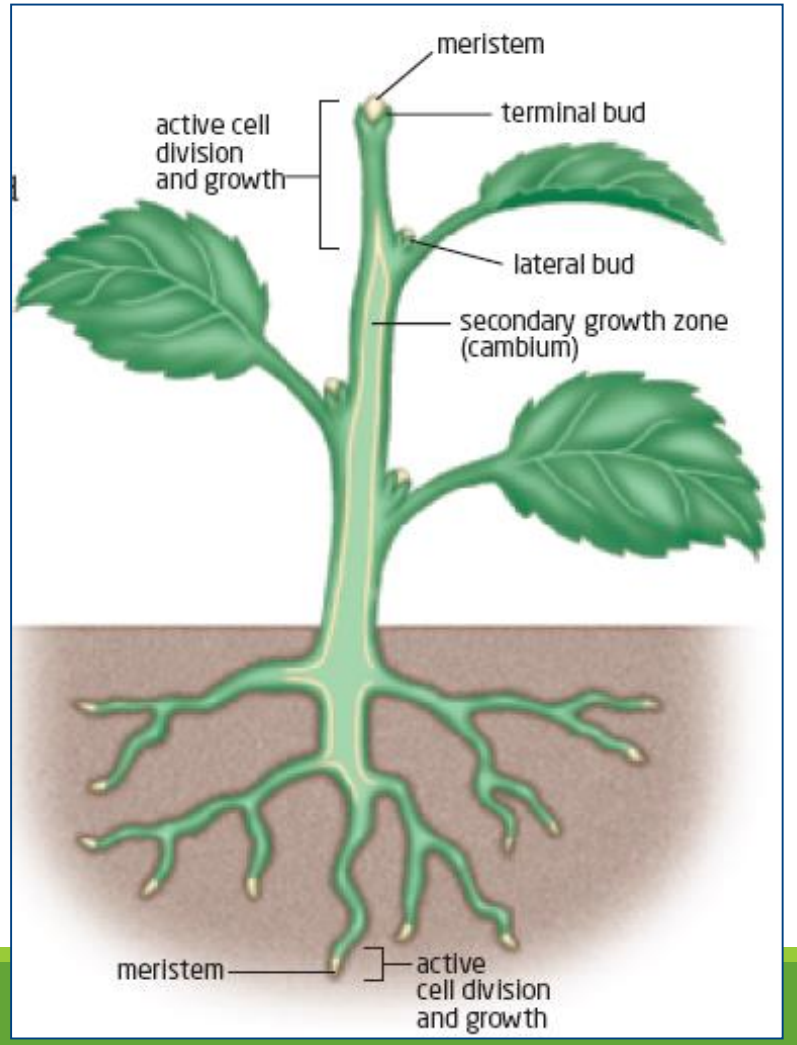
Ground Tissue:

Vascular Tissue:



Repairing/Replacing Specialized Cells

Plants tend to form new organs throughout their lifespan. This allows the plant to remain efficient and strong.



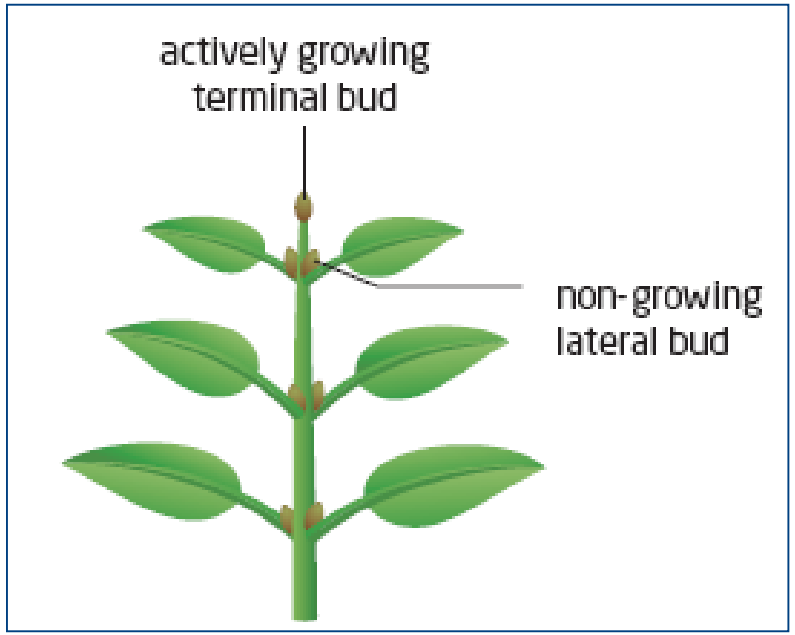
Bud:

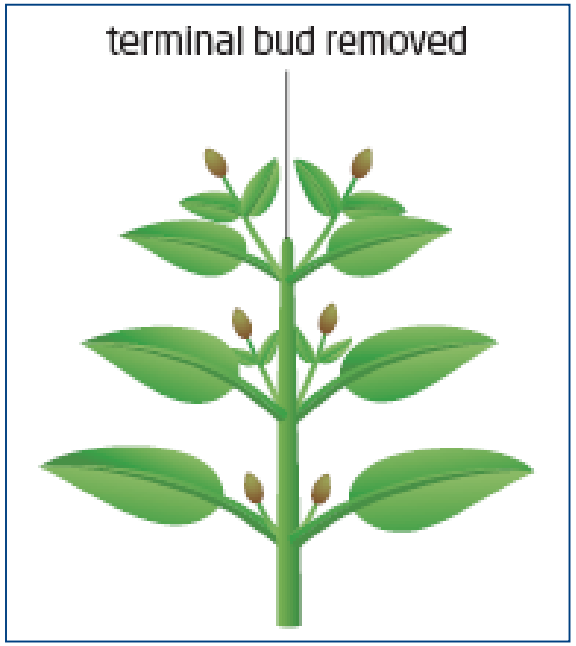
Terminal bud:

Lateral Bud:

Lateral Buds

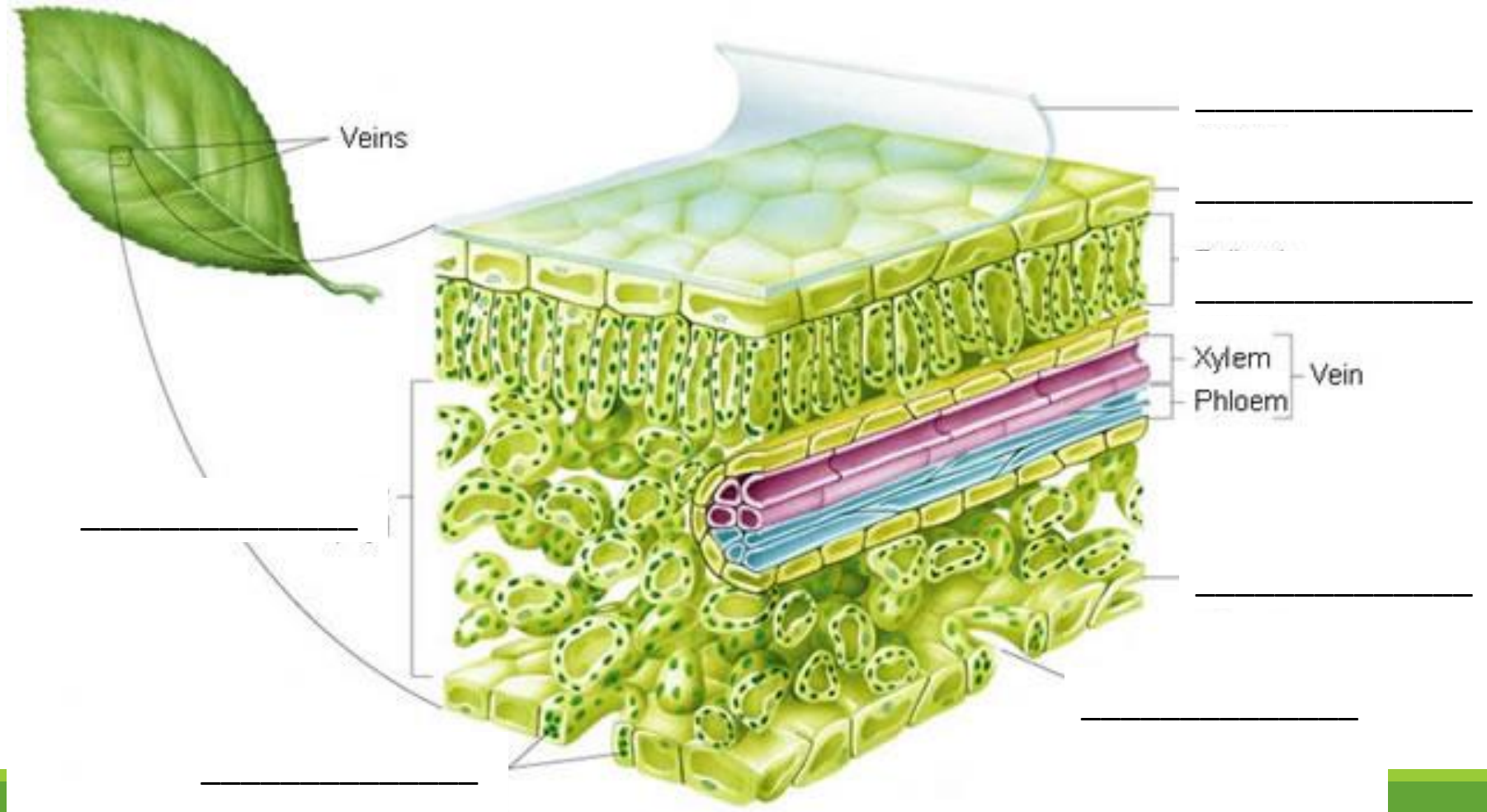
The chemicals released by growing areas in the plant is known as '_____'. Auxin causes the plant to grow vertically and not laterally.





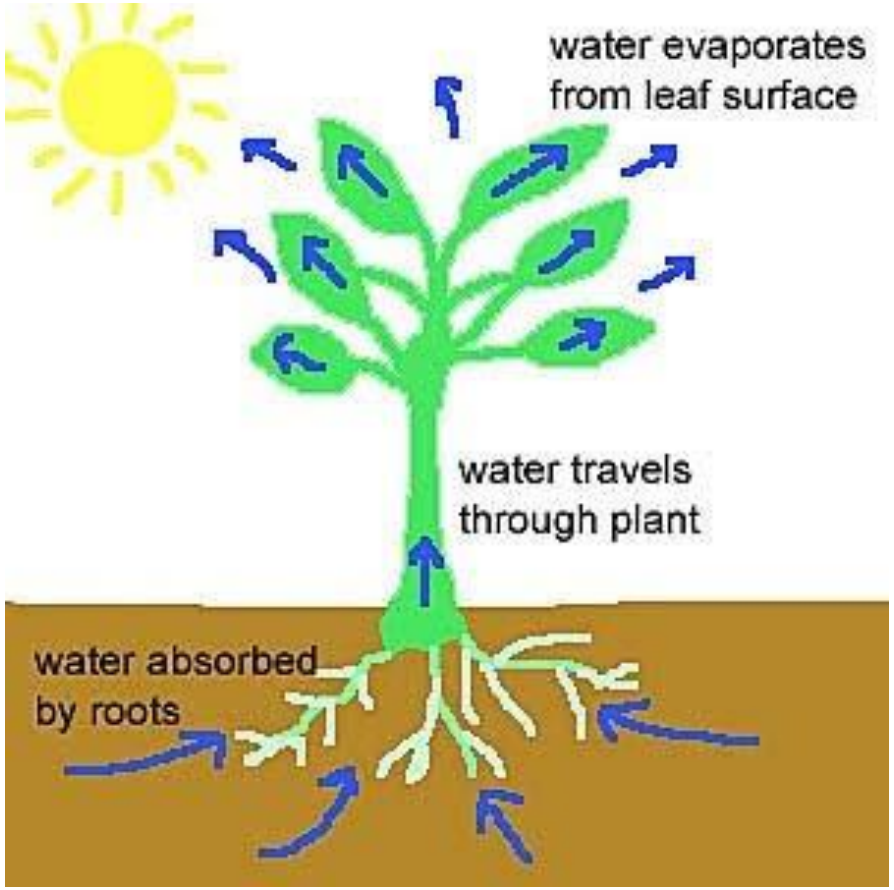
Leaf Structure

The leaf is responsible for the process of photosynthesis. Thus is requires a large surface area so that photosynthesis can occur efficiently.

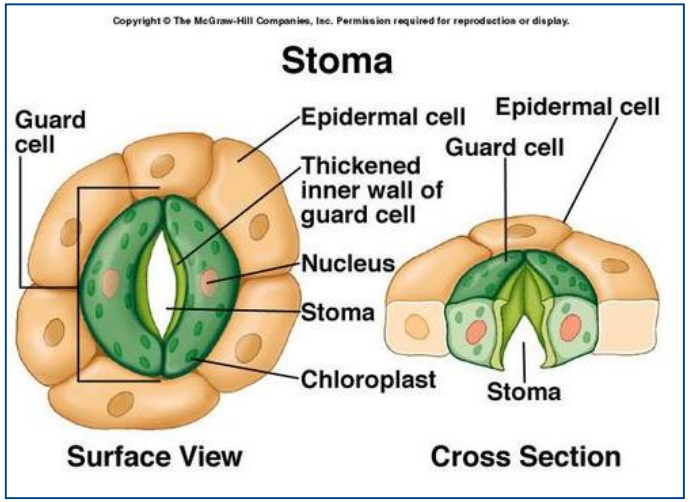


Leaf Structure	Function
Cuticle	
Palisade Cells	
Spongy Mesophyll Cells	
Stoma/Guard Cells	
Epidermis (upper/lower)	

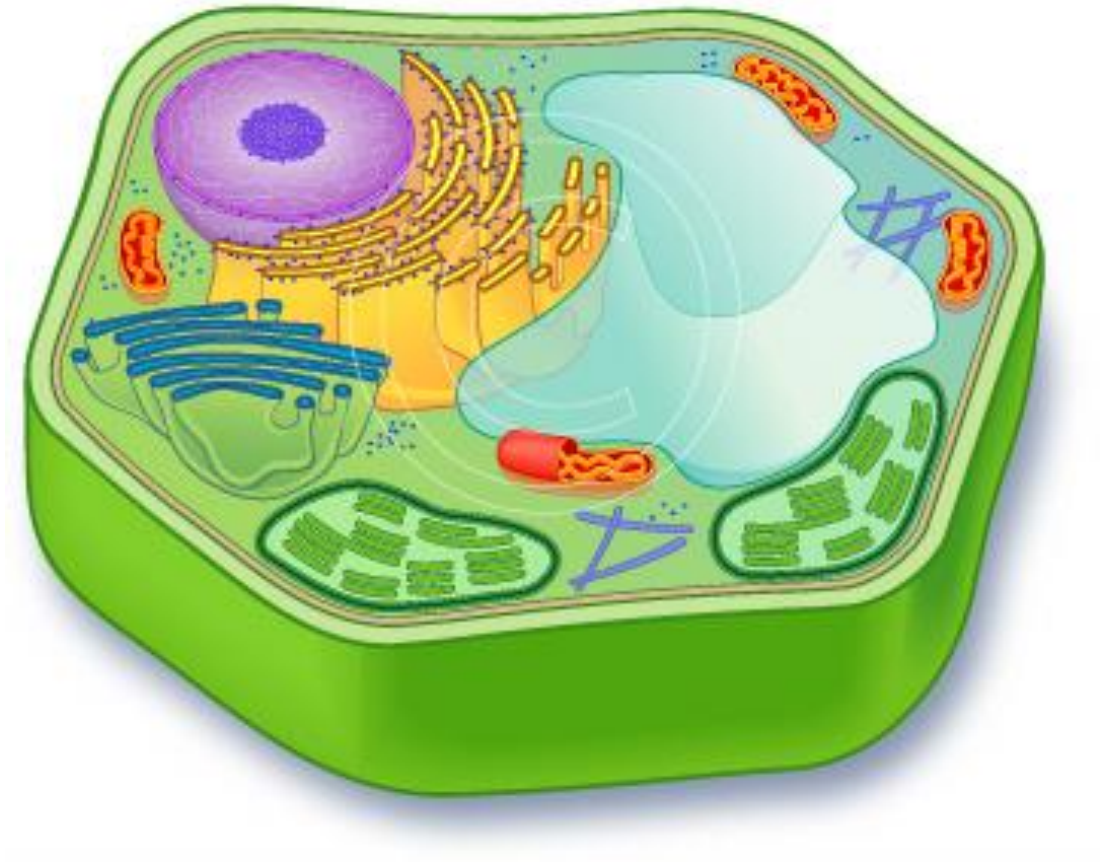
Transpiration through the leaf



Transpiration:



Remember . . .Plant Cells

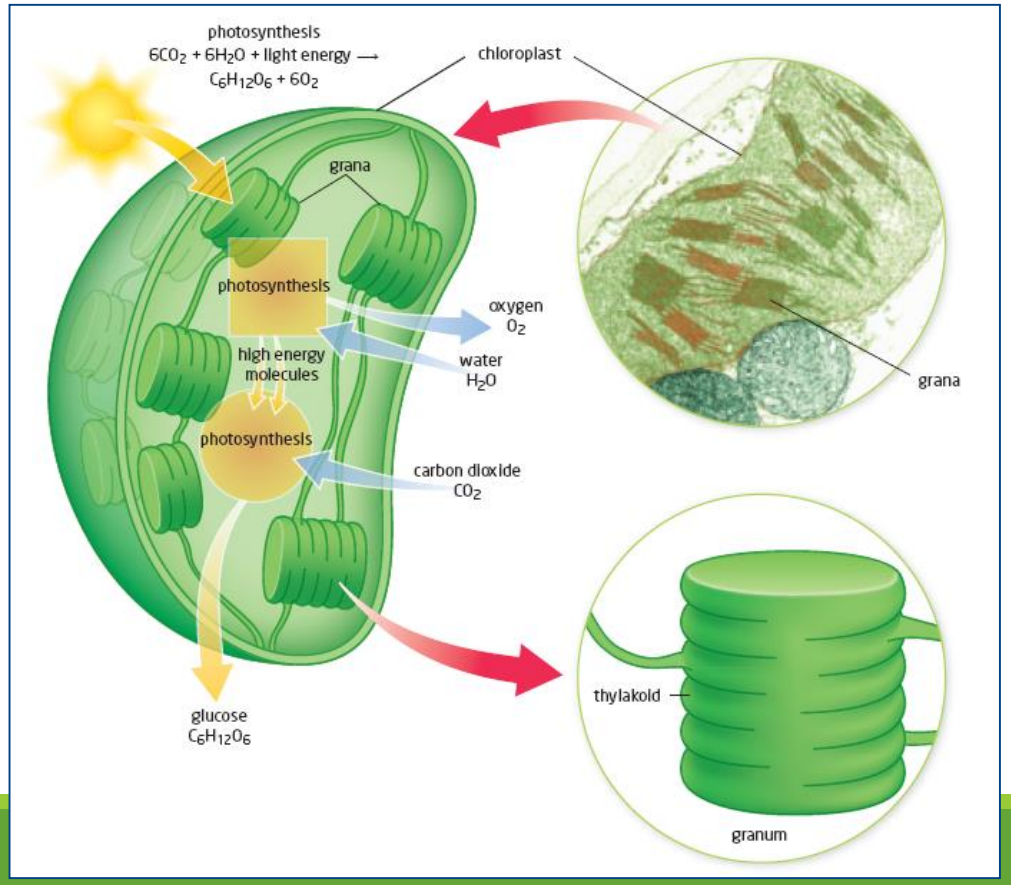


What are the key features of a plant cell that are not found within an animal cell?

How do these features help the plant remain healthy and perform important functions?

Chloroplasts

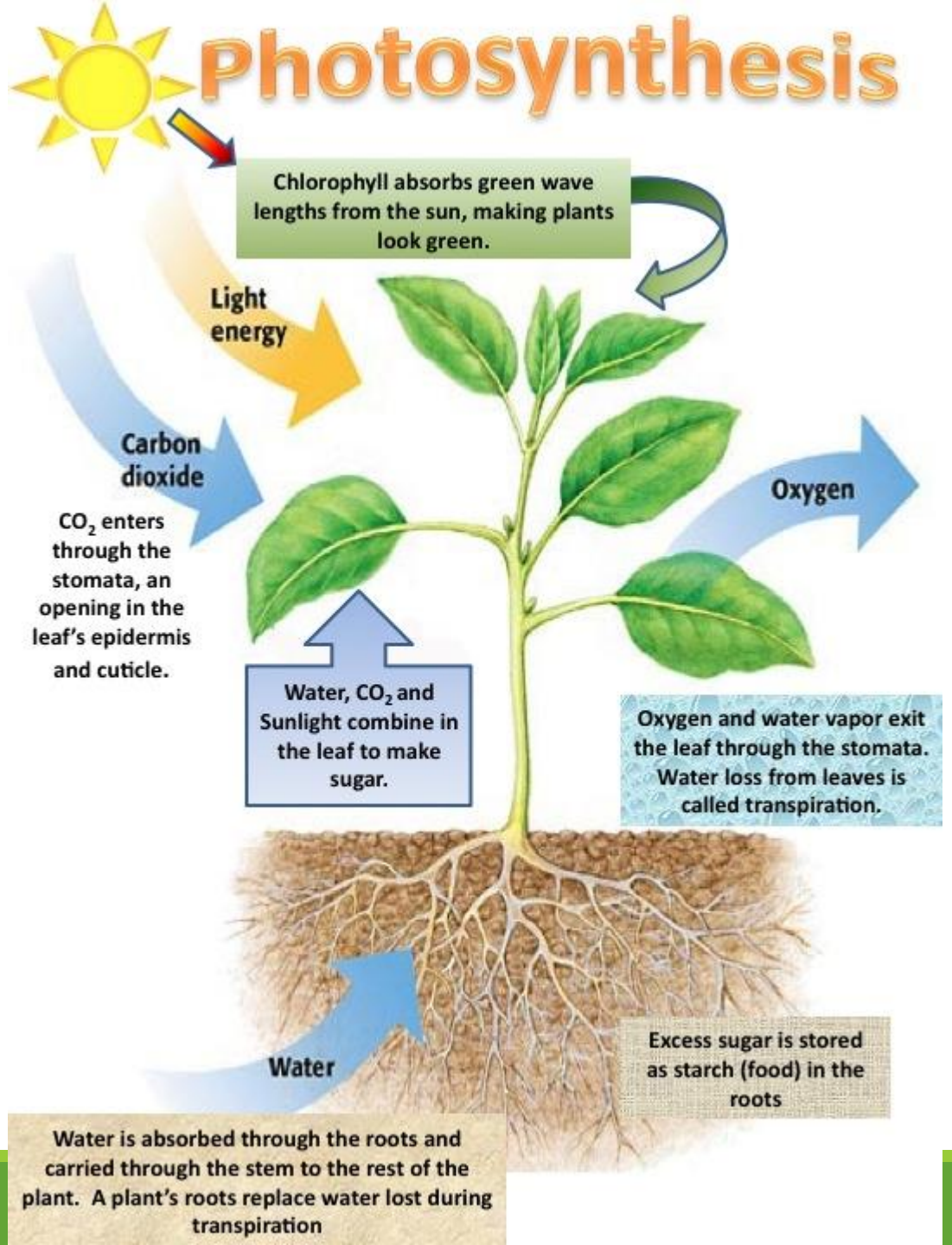
Chloroplasts – the organelles within plant cells that use the Sun's energy to chemically convert carbon into glucose (photosynthesis)



What is the equation that represents photosynthesis?

Where are the main reactants from the equation obtained?

What happens to the products of photosynthesis?



Homework

Complete pg. 62 # 1,2 & 4

pg. 64 # 5, 7 & 8