**November Notes: Day 1 Photosynthesis: Life from Light and Air**

Name: Period: Date:

**Do now:** Where in the cell does photosynthesis happen?

List 3 things plans need to grow?

Plants are energy producers

* Like animals, plants need to live
* Unlike animals, plants don’t need to food to make that
* Plants make both &
* Animals are
* Plants are

How do plants make energy & food?

* Plants use the energy from the
* to make energy
* to make
* , sucrose, cellulose, , & more

Using light & air to grow plants

**Photosynthesis:**

* Using sun’s make
* Using & to make
* Happens in
* allows plants to grow
* makes a waste product: oxygen ( )

Copy the photosynthesis chemical equation

What do plants need to grow?

* The “solar power plant” for making energy & sugars:
* Fuels: , ,
* The Helpers:

Chloroplasts are only in

So what does a plant need?

* Bring In: , ,
* Let Out:
* Move Around:

**Label the plant**

How do Plants get water?

* Water evaporates from the in the
* This motion pulls water up from
* Like with a more water is pulled up tree from

Stomates & Guard Cells

Function of stomates

* lets in
* lets out
* lets out: gets to leaves for photosynthesis

Function of guard cells

◆ & stomates

Label Stomate and guard cells

Guard cells & Homeostasis

Homeostasis: keeping the internal environment of the plant balanced

Stomates open

* Let in : needed to make
* Let out: needed for
* Let out: get rid of product

Stomates close

* if too much H2O is

Xylem: Carries up the roots

Phloem: Carries -conducting cells. Carry sugars around the plant wherever they are needed: new leaves, fruit & seeds, roots

How are they connected?

**Copy the Respiration and the photosynthesis equations**