Name:		Class/Section: 10	Date:	
Unit: 3- Cells	Chapter: 8- Photosynthesis	Lesson: 8.2 Photosynthesis: An overview & 8.3 Process of Photosynthesis	Textbook p.: 230-234	
KUBS  AND Sold Spatial Stages Althor Links and Ringes		Classwork	Grade: %	

### TRUE or FALSE (4 marks)

1.	TRUE	FALSE	Light independent/dark reactions can occur on their own
2.	TRUE	FALSE	ADP & NADP + are important energy carriers for the light independent reaction
3.	TRUE	FALSE	Photosynthesis takes place in the chloroplast of animal cells.
4.	TRUE	FALSE	Chlorophyll makes electrons.

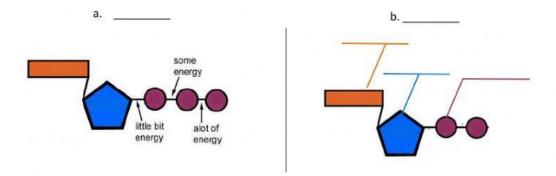
### FILL IN THE BLANK. Select the correct answer. (13 marks)

- 5. Photosynthesis / Energy is the ability to do work.
- 6. The main chemical compound cells use for energy is ATP / ADP
- 7. Ribose / Deoxyribose is a 5- carbon sugar molecule that is part of an ATP molecule.
- 8. The Adenine / Sugar / Phosphate Groups of ATP the key to its ability to store and supply energy.
- 9. ATP releases energy when it binds / breaks bonds between its phosphate groups
- 10. Most cells only store enough ATP for a few seconds / a few minutes / a few hours of activity.
- 11. All heterotrophs must produce / consume to get energy.
- 12. The energy in food originally came from the sun / other animals
- 13. The energy of sunlight is stored in the chemical bonds of ATP / ADP / C6H12O6
- 14. ATP / ADP / C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> has 90 times more energy than ATP / ADP / C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>
- 15. The cell's source of energy is ATP / food
- 16. ATP / ADP / C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> is a great energy releaser
- 17. ATP / ADP / C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> is a good temporary energy storage.



# 18. Label the below images (ATP or ADP

Then label each component in image b as either Sugar, Phosphate or Adenine. ) (5marks)



# **IDENTIFY (5 marks)**

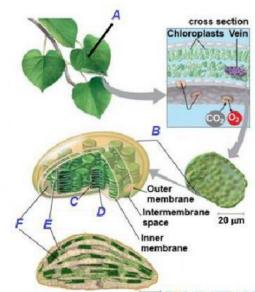
19. Identify the correct term that matches the statement below.

a) Organisms that make their own food.	Heterotroph / autotroph	
b) Site of photosynthesis – LIGHT DEPENDENT REACTION	Stroma / thylakoid	
c) C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	Carbon Dioxide / Water / Glucose	
d) Carrier of high energy electrons (empty)	NADP⁺ NADPH	
e) Byproduct of photosynthesis	CO <sub>2</sub> / H <sub>2</sub> O / O <sub>2</sub>	

#### **DIAGRAMS**

20. For the image below match the letter to the correct description (6 marks)

 Leaf
 Thylakoid
 Thylakoid Membrane
 Granum
Stroma
 Chloroplast



" LIVEWORKSHEETS

# 20. Label the photosynthesis diagram. (5 marks)

Sunlight	Dar	k Reaction	H <sub>2</sub> O	CO <sub>2</sub>	O <sub>2</sub>
Sugar		NADP	Lig	nt Reaction	ATP

