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
HUBS	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.

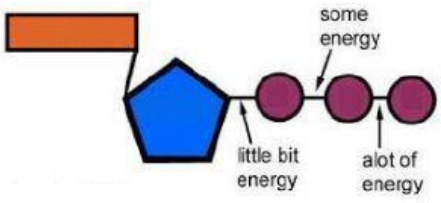
FILL IN THE BLANK. Select the correct answer. (13 marks)

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 / $C_6H_{12}O_6$]
14. [ATP / ADP / $C_6H_{12}O_6$] has 90 times more energy than [ATP / ADP / $C_6H_{12}O_6$]
15. The cell's source of energy is [ATP / food]
16. [ATP / ADP / $C_6H_{12}O_6$] is a great energy releaser
17. [ATP / ADP / $C_6H_{12}O_6$] is a good temporary energy storage.

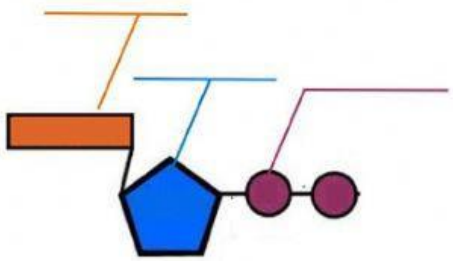
18. Label the below images (ATP or ADP

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

a. _____



b. _____



IDENTIFY (5 marks)

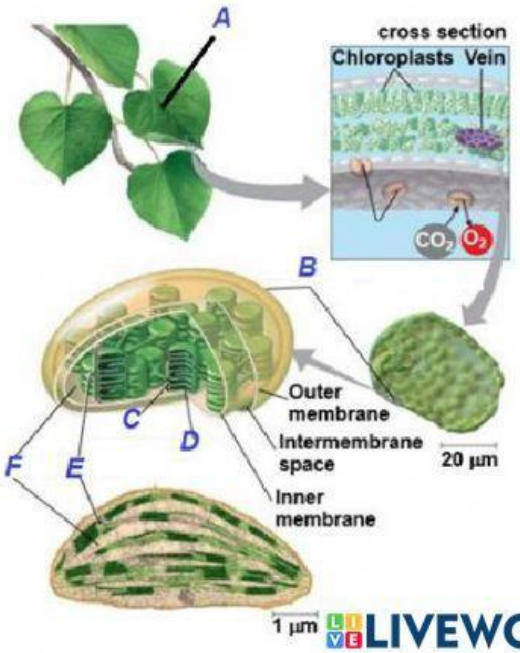
19. Identify the correct term that matches the statement below.

a) Organisms that make their own food.	Heterotroph / autotroph
b) Site of photosynthesis – LIGHT DEPENDENT REACTION	Stroma / thylakoid
c) $C_6H_{12}O_6$	Carbon Dioxide / Water / Glucose
d) Carrier of high energy electrons (empty)	$NADP^+$ NADPH
e) Byproduct of photosynthesis	CO_2 / H_2O / O_2

DIAGRAMS

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

_____	Leaf
_____	Thylakoid
_____	Thylakoid Membrane
_____	Granum
_____	Stroma
_____	Chloroplast



20. Label the photosynthesis diagram. (5 marks)

Sunlight	Dark Reaction	H_2O	CO_2	O_2
Sugar	NADP	Light Reaction	ATP