## SANGAM S K M COLLEGE-NADI

## YEAR 12 BIOLOGY WORKSHEET SOLUTIONS

## WEEK 3

- 1. **a-chlorophyll** 
  - b- granum
  - c- thylakoid
  - d- stroma

2.

carbon dioxide + water 
$$\begin{tabular}{c} energy from light \\ \hline chlorophyll in leaves \end{tabular}$$
 glucose + oxygen 
$$\begin{tabular}{c} 6CO_2 + 6H_2O & \longrightarrow C_6H_{12}O_6 + 6O_2 \end{tabular}$$

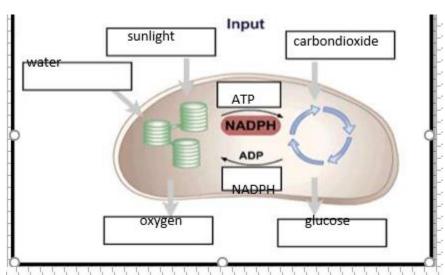
3.

- Splits water molecules
- Energies electrons
- 4. Complete the table given below.

Reaction	Where does it take place in the	Reactants	Products
	chloroplast		
Light Reaction	Thylakoid membrane	Water	Oxygen ATP electrons
Dark Reaction	Stroma and cell	Carbon dioxide	Glucose
Dark Reaction			Glucose
	cytoplasm	Hydrogen	
		ATP	

- 5. **ATP contains 3 phosphates** 
  - ADP contains 2 phosphate.
- 6. Increase in the carbon dioxide concentration will also increase photosynthesis since carbon gets incorporated as carbohydrate (C6H12O6).

7.



8. Acts as electron taxi to carry electrons to dark reaction.

9.

- 1- Inner membrane
- 2- Outer membrane
- 3- Matrix
- 4- Cristae



- 11.
- -carbon dioxide
- -ethanol
- 12. Increases surface area to volume ratio inside the organelle.