# Photosynthesis and The Calvin-Cycle

## Across
1. The openings in a leaf that allow the passing of gases into and out of the leaf
2. An important gas produced in photosynthesis
4. A small membranous sac within a chloroplast of a plant
6. Singular form of grana
10. Needed for photosynthesis, along with carbon dioxide and the sun.
14. Adenosine triphosphate (nucleotide)
16. Green pigment in plants
17. The stacks of thylakoids embedded in the stroma of the chloroplast
18. The original source of all earths energy
19. The decomposition or separation of molecules by the action of light
20. CO2

## Down
3. A living organism (tree, shrub, leaf, flower, etc.)
5. Process in which plants use the suns energy to make food
7. Organism that makes its own food from the sun
8. The place in a plant cell where photosynthesis happens
9. a sugar made up of carbon (C), hydrogen (H), and oxygen (O)
11. The water based, fluid filled area of the chloroplast
12. Protein molecules that aid in photosynthetic reactions
13. Sugar formed from carbon dioxide and water
15. Dark or light independent reactions

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**STOMATA**

**THYLAKOID**

**GRANUM**

**WATER**

**SUN**

**CARBON DIOXIDE**

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**CARBON DIOXIDE**

**WATER**

**ATP**

**ND**

**E**

**S**

**P**

**A**

**T**

**H**

**Y**

**L**

**R**

**A**

**N**

**G**

**E**

**N**

**P**

**T**

**O**

**M**

**A**

**T**

**A**

**O**

**2**

**X**

**Y**

**G**

**E**

**N**

**P**

**3**

**T**

**4**

**H**

**Y**

**L**

**A**

**K**

**O**

**D**

**A**

**P**

**5**

**G**

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