Photosynthesis and Cellular Respiration Crossword Puzzle

Across
3. The 1st step of Photosynthesis; Light Energy is captured and stored as NADPH and Oxygen gas is released; requires light
5. Flattened discs where Light-Dependent Reactions occur
6. The process by which cells obtain energy from Carbohydrates; Atmospheric Oxygen combines with Glucose to form Water and Carbon Dioxide
9. The Organelle found in plants and algae cells where Photosynthesis takes place
11. Cannot occur without Oxygen; requires Oxygen
12. The process by which plants, algae, and some bacteria use sunlight, carbon dioxide, and water to produce Carbohydrates and Oxygen
13. A series of biochemical reactions that convert Pyruvic Acid into Carbon Dioxide and Water; it is the major pathway of oxidation for many organisms and it releases energy; 2nd Step of Cellular Respiration
15. Able to make energy from Light Energy (Plants)
16. Able to make energy from Chemicals (Bacteria)
17. The 2nd step of Photosynthesis; Calvin Cycle forms Organic compounds using the stored energy (Glucose)

Down
1. Obtains energy from food; Cannot make energy (Animals & Humans)
2. Known as ETC, it converts the most energy into ATP for cells; domino effect; Final Step in Cellular Respiration
4. Ca occur with or without Oxygen present; Does NOT require Oxygen
7. The anaerobic breakdown of glucose to Pyruvic Acid, which makes a small amount of energy available to cells in the form of ATP; 1st Step of Cellular Respiration
8. A green pigment found in most plant cells; gives plants their green color, reacts with sunlight, carbon dioxide, and water to form Carbohydrates; located in Chloroplast
10. Stacks of Thylakoids
14. The Solution/Space inside the Thylakoid where Light-Independent Reactions occur

Word Bank
Cellular Respiration
Aerobic Respiration
Heterotrophs
Light-Independent Reactions
Anaerobic Respiration

Krebs Cycle
Chemotrophs
Chlorophyll
Glycolysis

Chloroplast
Photosynthesis
Electron Transport Chain
Autotrophs

Light-Dependent Reactions
Grana
Stroma
Thylakoid

Name: ___________________________  Date: _______________  Period: _______