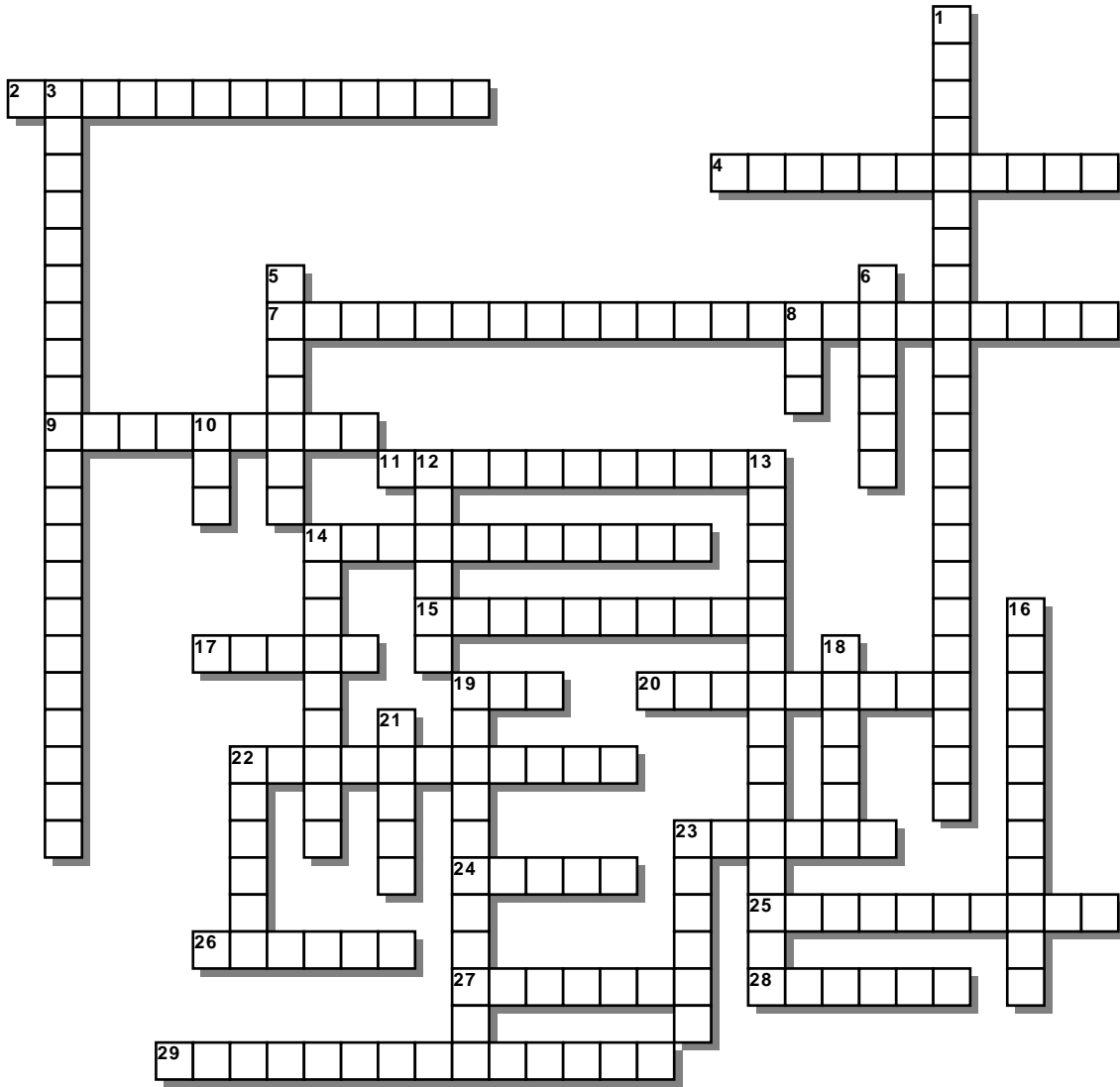


# Photosynthesis



**Across**

- 2 - enters the Calvin cycle from the atmosphere  
4 - obtains energy by consuming plants or animals  
7 - occur in the thylakoid membrane  
9 - sac-like photosynthetic membrane
- 11 - occurs in the stroma of a chloroplast  
14 - cluster of chlorophyll and other pigments  
15 - determined that trees gain most of their mass from water  
17 - determined that plants convert light energy to chemical energy  
19 - basic energy source of all cells  
20 - makes its own food
- 22 - light absorbing pigment in chloroplasts  
23 - region outside the thylakoid membranes  
24 - electron carrier in the light-dependent reactions of photosynthesis  
25 - determined that plants need sunlight to produce oxygen  
26 - the ability to do work
- 27 - a component of ATP  
28 - a component of ATP  
29 - factor affecting the rate of photosynthesis

**Down**

- 1 - a series of electron carriers  
3 - ATP  
5 - product of the Calvin cycle  
6 - determined the process by which electrons are transferred  
8 - color of light absorbed by chlorophyll  
10 - "partially filled battery"  
12 - type of transport that moves hydrogen ions into the inner thylakoid space  
13 - transports high energy electrons from chlorophyll to other molecules  
14 - determined that plants produce oxygen  
16 - factor affecting the rate of photosynthesis  
18 - a stack of thylakoids  
19 - binds ADP to a phosphate group as it spins  
21 - color of light reflected by chlorophyll  
22 - determined that carbon forms glucose  
23 - photosynthesis is a \_\_\_\_\_ of reactions