**Vocabulary:** **Photosynthesis Lab**



**Vocabulary**

* Carbon dioxide – a colorless, odorless gas that is produced during respiration and combustion (burning).
	+ Carbon dioxide is used by plants during photosynthesis.
	+ The chemical formula of carbon dioxide is CO2.
	+ Average CO2 concentrations in Earth’s atmosphere are about 390 ppm (parts per million).
* Chlorophyll – a green pigment in plants that absorbs light energy and converts it into a form the plant can use for photosynthesis.
* Glucose – a simple sugar that is a major energy source for cells.
	+ Glucose is produced in photosynthesis.
	+ The chemical formula of glucose is C6H12O6.
* Limiting factor – the required substance that is in shortest supply and therefore limits growth or other life processes.
	+ In many ecosystems, food is the limiting factor that keeps populations in check.
	+ For plants, nutrients such as phosphorous and nitrogen are often limiting factors in the spring and summer. Cold temperatures limit growth in the winter.
* Nanometer – a tiny unit of distance, equal to one billionth of a meter.
	+ The symbol for a nanometer is “nm.”
* Photosynthesis – a process in which plants use energy from light to produce glucose and oxygen from carbon dioxide and water.
	+ The chemical equation for photosynthesis is: CO2 + H2O 🡪 C6H12O6 + O2

This reads: Carbon dioxide and water react to yield glucose and oxygen.

* + Glucose is used by the plant for energy. It can also be used as a building block for complex sugars such as cellulose.
	+ Some oxygen is used by the plant, but most is released.
* Wavelength – the distance between two consecutive crests of a wave.
	+ The wavelength of visible light ranges from 400 nanometers (violet) to 700 nanometers (red).