



1. Light strikes chlorophyll in photosynthesis, releasing an electron from each molecule. Through the formation of NADPH this electron will be part of the bonds between carbon atoms of sugars.
2. Chlorophyll⁺ gets the electron back (regenerating *chlorophyll*, a true catalyst) from the release of an electron by photosystem II
3. Photosystem II's chlorophyll⁺ (formed when different frequencies of light strikes chlorophyll) gets electrons back from water, which splits to form oxygen and H⁺. See above diagram for steps 4 and 5.