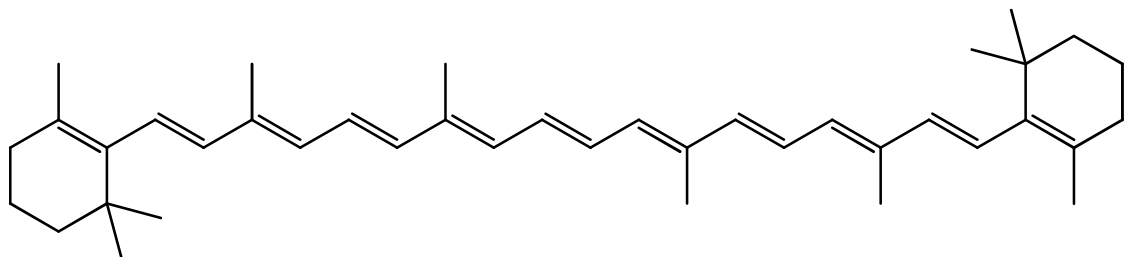
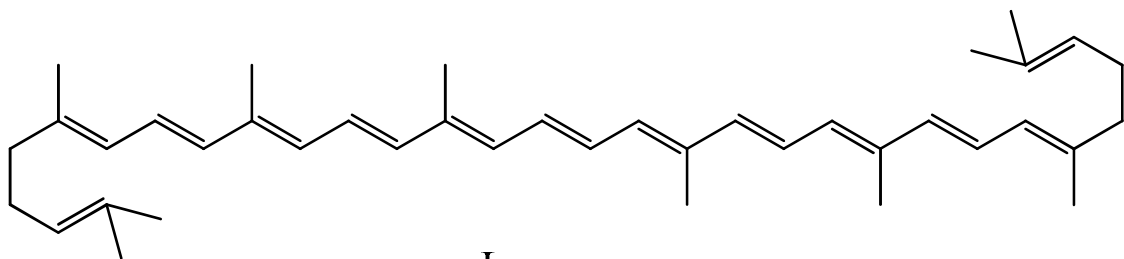


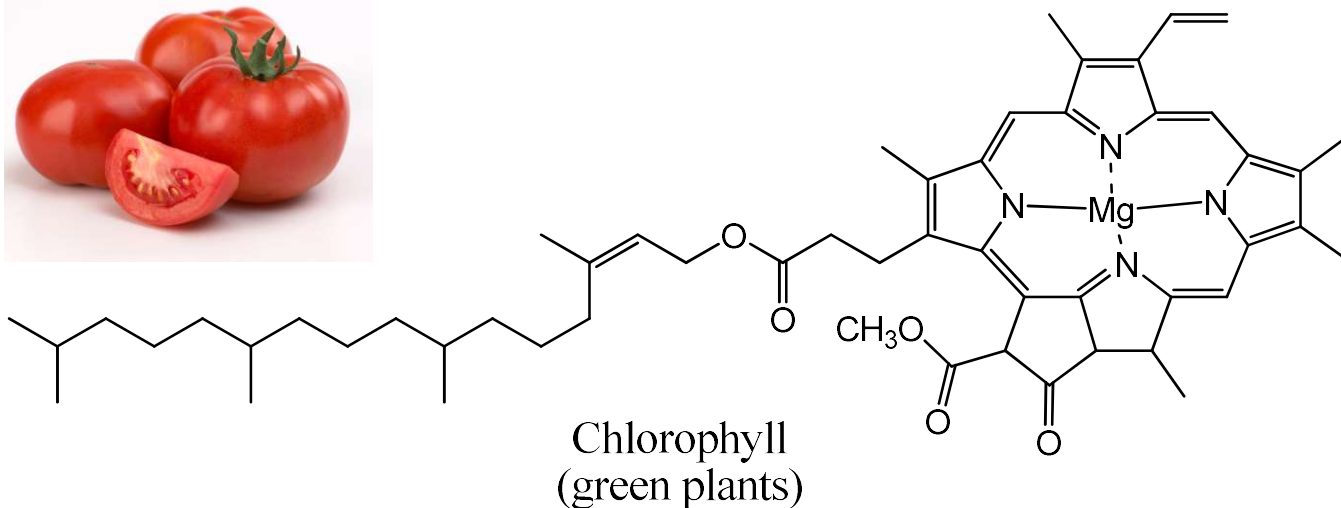
# Color Chemistry: Electronic Transitions



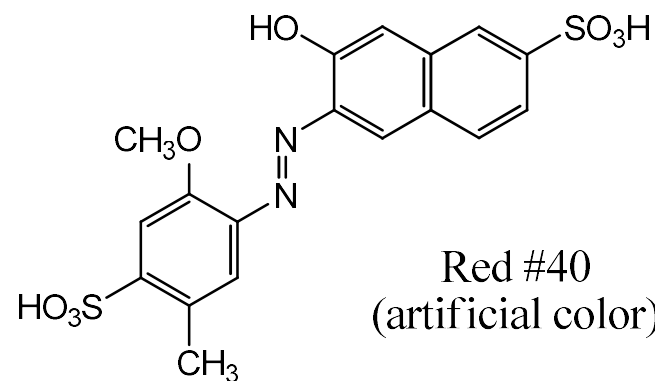
$\beta$ -Carotene (orange plants - carrots)  
 $\pi \longrightarrow \pi^*$  454 nm (blue light absorbed)



Lycopene  
(red plants - tomatoes)



Chlorophyll  
(green plants)



Red #40  
(artificial color)