CONCEPT: PHOTOPHOSPHORYLATION

- Heterotrophs produce CO₂ and H₂O from carbohydrate metabolism, and autotrophs consume CO₂ and H₂O
- Autotrophs produce O₂ and carbohydrates, and heterotrophs consume carbohydrates and O₂



- Chlorophyll a contains a porphyrin ring with Mg, absorbs light maximally at 680nm
- Accessory pigments include chlorophyll b and carotenoids that broaden the absorption spectrum for the organism
 - □ Carotenoids contain isoprenes, and phycobilins have a tetra-pyrole, like chlorophyll

- Absorption spectrum spectrum of light that can be absorbed
- Action spectrum plot of photosynthetic activity against wavelength of light

