

BOTANY- CHAPTER 6 & 10: TROPISMS AND LIGHT

Key Vocabulary	Assignments
Absorption (of light)	<p>1. Read from page 140 (starting at “The environment is also important”) to page 145 (ending at “inquiry summary”). Answer the following questions:</p> <ol style="list-style-type: none"> 1. What is a tropism? 2. What is the role of auxin in photo and thigmotropism? 3. How are nastic movements different from tropisms? 4. What is the value of heliotropism in maintaining leaf temperature? How is this regulation of leaf position accomplished? 5. What is photoperiod and why is the name backwards (shouldn't it be dark period)? 6. What are the ways that photoperiod impacts plant growth and development? <p style="text-align: right;">Due:</p> <p>2. Read “Talking plants” by Sharman Apt Russell. Discover Magazine, 04.01.2002. then answer the following questions:</p> <ol style="list-style-type: none"> 1. What role do chemical signals play in plant communication? 2. Why are Tobacco plants good subjects for study? 3. What is the natural role of nicotine? 4. What is the benefit to attracting wasps to injured cotton plants? 5. What is the relationship between Sagebrush and tobacco? 6. How might understanding plant communication help humans grow more crops with fewer pesticides? <p style="text-align: right;">Due:</p> <p>3. Read pages 323-236 (end at the first “inquiry summary”) then answer the following questions:</p> <ol style="list-style-type: none"> 1. What is a photosynthetic autotroph? 2. Why were the original organisms on earth heterotrophs? 3. What is light? What determines an object's color? 4. What is the role of pigments in photosynthetic plants? 5. What's the deal with chlorophyll a and b and all this nonsense about carotenoids? <p style="text-align: right;">Due:</p> <p style="text-align: center;">Don't forget to collect and record your Phototropism Lab Data</p>
Auxin	
Geotropism	
Heterotroph	
Hydrotropism	
Light	
Nastic Movements	
Negative tropism	
Photon	
Photoperiod	
Photosynthesis	
Photosynthetic autotroph	
Phototropism	
Pigment	
Positive tropism	
Spectrum	
Thigmatropism	
Visible light	
Wavelength (of light)	