

Arnold Arboretum Field Investigation • Tuesday, June 27, 2017
Bridge to AP Biology • Hinton Scholars • Harvard Medical School
Find resources > <http://hinton.harvardmedk12.wikispaces.net/bridge17>

8:00-9:00 am – Breakfast	11:00-11:30 – poster
9:00-9:15 – Team assignments	11:30-11:45 – team share
9:15-9:30 – walk to field location	11:45-12:45 – lunch
9:30-11:00 – field investigation	12:45 - Dismissal

AA7 Capodagli	1. Is there a relationship between soil temperature and soil depth? What about soil composition? How might differences in temperature and/or composition affect the types of organisms that inhabit the soil?	Vernier Temp Quadrat
AA2 CJ, Nguyen*	2. In what ways does plant life vary with distance from a pond? What factors may account for any differences observed?	Mobile camera Quadrat
AA3 Tobin, E. Chen*	3. How does light intensity vary in a forest? How might variations in light intensity affect the distribution and diversity of plant life in a forest?	Vernier Light Quadrat
AA2 CJ, M. Chen *	4. Do levels of dissolved oxygen vary between a stream and a pond? What factors might influence the amount of dissolved oxygen in an aquatic system? How might variations in dissolved oxygen concentration affect the types of aquatic organisms that inhabit the water? Do differences in aquatic life influence surrounding terrestrial life?	Vernier DO
AA2 Rochlin, Lomasney*	5. Does water temperature vary at different locations? What factors might influence the presence or absence of variations in temperature at and below the surface? What are the implications for pond life?	Vernier Temp
AA6 Schoonder- woerd	6. a. How do spiny structures vary among different tree species? b. What can these differences tell us about plant development and evolution? Kristel Schoonderwoerd, Friedman Lab, Arnold Arboretum, Harvard University	Mobile camera
AA2 Rochlin	7. Is there a relationship between dissolved oxygen and water temperature? What are the potential implications for aquatic organisms?	Vernier DO
AA1a,b Pontillas	8. Is there a relationship between elevation and plant life? What environmental factors change with elevation? How might these factors influence the distribution and diversity of plants at varying elevations?	Mobile camera Quadrat
AA4 Via, Wleh*	9. How does lichen coverage and diversity change with elevation and/or distance from busy streets? What factors may affect patterns in distribution?	Vernier CO2 Quadrat
AA5 Capodagli	10. What are the consequences of invasive insect populations on a habitat? What can be done to preserve native habitats? Are these interventions effective?	Mobile camera Quadrat


#hinton18
#field2


#hinton17
#field6


#hinton17
#field8


#hinton17
#field10

AA = Arnold Arboretum • <http://www.arboretum.harvard.edu> • Twitter: @ArnoldArboretum *Hinton Mentor Student

You will be assigned to 1 of 10 research teams. Teachers will give instructions to your team. Your team will discuss the question(s) and devise a plan for collecting field data. Each team will create a poster response to report your findings.



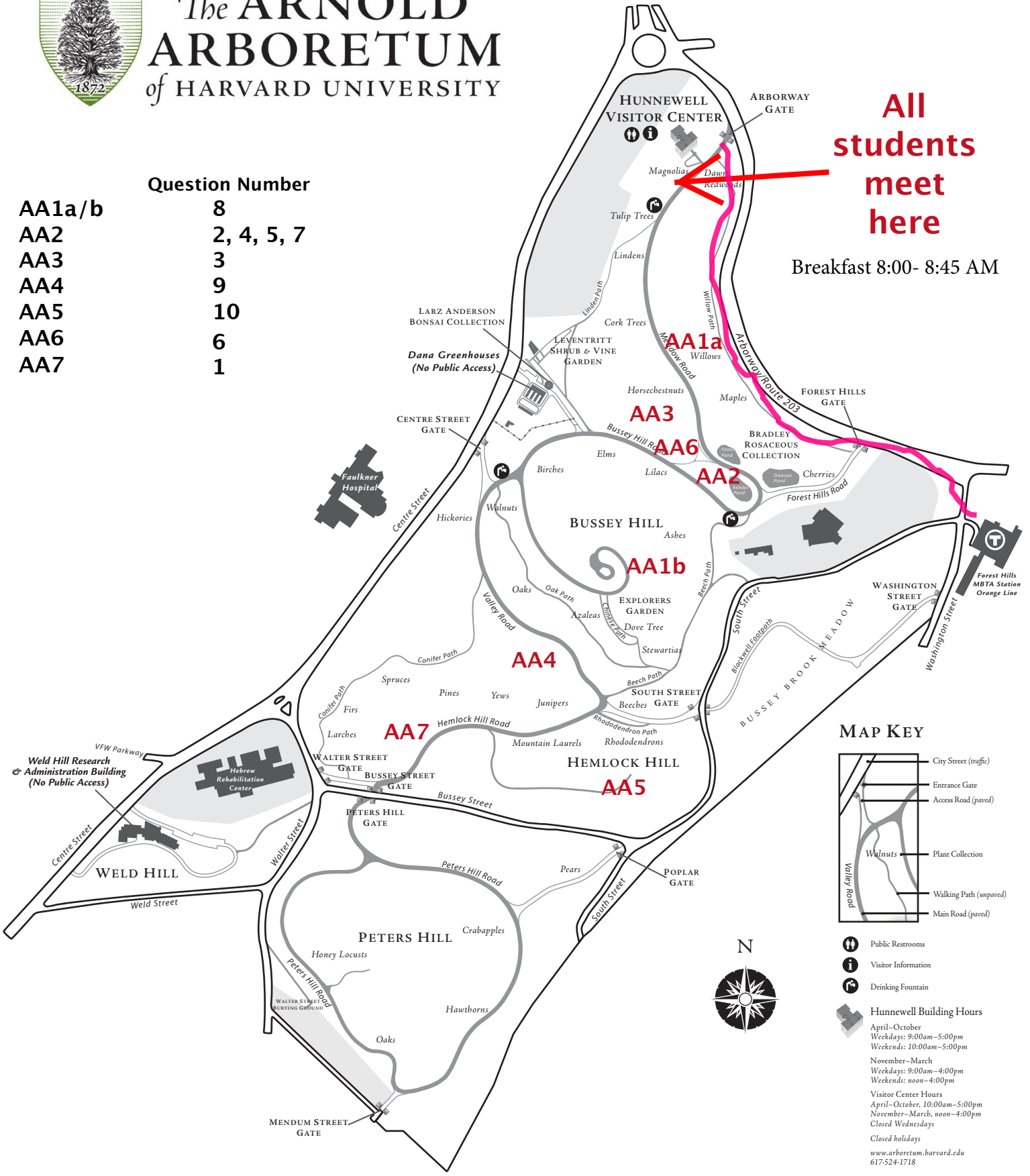
The ARNOLD ARBORETUM of HARVARD UNIVERSITY

- AA1a/b
- AA2
- AA3
- AA4
- AA5
- AA6
- AA7

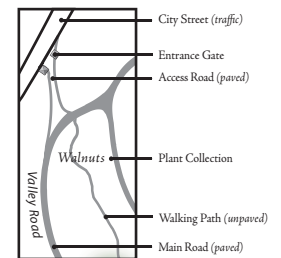
Question Number	
8	
2, 4, 5, 7	
3	
9	
10	
6	
1	

All students meet here

Breakfast 8:00- 8:45 AM



MAP KEY



- Public Restrooms
- Visitor Information
- Drinking Fountain
- Hunnewell Building Hours**
 April–October
 Weekdays: 9:00am–5:00pm
 Weekends: 10:00am–5:00pm
 November–March
 Weekdays: 9:00am–4:00pm
 Weekends: noon–4:00pm
Visitor Center Hours
 April–October, 10:00am–5:00pm
 November–March, noon–4:00pm
 Closed Wednesdays
 Closed holidays
www.arboretum.harvard.edu
 617-524-1718

