

CHAPTER 3	Investigation 3.A: Observing Leaves Answer Key	BLM 3.1.3A
ANSWER KEY		

Answers to Analysis Questions

1. Abiotic conditions will vary between the two sites (light is the abiotic factor that will be most relevant). Describe these differences quantitatively when possible, and explain why the differences occur. You should describe other abiotic factors (e.g., temperature) as well.
2. Calculate averages for your two sites separately, then compare results of the differences in needle length or leaf surface area. If there is no difference between sample sites, look at another measurable variable (for example leaf mass) or formulate a new research question.
3. Differences in leaf morphology will occur when light levels vary. Leaves with greater light exposure will likely be larger in order to maximize photosynthetic rates. Plants will arrange their leaves in an attempt to maximize light interception and minimize photoinhibition.