

Name: _____ Date: _____

EXPERIMENT 19

Spectroscopy 1: Spectra of Atomic Hydrogen and Nitrogen

Pre-Laboratory Questions

1. Calculate ΔE for each of the following transition of hydrogen, which result in visible lines:

a) $n = 6 \rightarrow 2$

b) $n = 5 \rightarrow 2$

c) $n = 4 \rightarrow 2$

d) $n = 3 \rightarrow 2$

(over for question 2)

2. For each transition in question 1, calculate the wavelength of the photon emitted (**in nm**).