

Name: _____

Atomic Spectra

DATA SHEET

I. Flame emission

A. Observation of known metals

1. Li

2. Ba

3. Ca

4. Sr

5. Cu

6. Na

7. K

B. Determine the identity of two unknown metals

1. Unknown # _____

Observations

Identity

2. Unknown # _____

Observations

Identity

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II. Arc emission (observe the lamps without the spectroscopes)

A. Visual observations

1. Helium
2. Hydrogen
3. Mercury vapor
4. Neon

B. Observe the lamp through the spectroscope provided.

1. Helium
2. Hydrogen
3. Mercury vapor
4. Neon

C. Describe the differences between any two of the lamps

1. Without the spectroscope
2. With the spectroscope

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REVIEW QUESTIONS

1. Describe atomization.

Summarize the flame emission process.

In doing flame emission work, why is it important not to use the same wire loop to test all chemicals?