

Element Name

Symbol

Use the Periodic Table to complete questions #2 and #3.

2a. How can you determine the number of protons, neutrons, and electrons from the Periodic Table?

Protons: \_\_\_\_\_

Neutrons: \_\_\_\_\_

Electrons: \_\_\_\_\_

2b. Determine the number of protons, neutrons, and electrons for your element by using the atomic number and atomic mass.

What is the element's atomic number? \_\_\_\_\_

What is the element's atomic mass? \_\_\_\_\_

Protons = \_\_\_\_\_ Neutrons = \_\_\_\_\_ Electrons = \_\_\_\_\_

(NOTE: Atomic mass - atomic number = neutrons)

3. Determine the number of electrons in each electron energy level.  
(Level 1 = 2, Level 2 = 8, Level 3 = 18, Level 4 = 32)

Number of electrons in your element:

Level 1 = \_\_\_\_\_ Level 2 = \_\_\_\_\_ Level 3 = \_\_\_\_\_ Level 4 = \_\_\_\_\_

**Conclusion:**

1a. In what ways is your model of an atom different from an actual atom? \_\_\_\_\_

\_\_\_\_\_

1b. How is your model of an atom like an actual atom? \_\_\_\_\_

\_\_\_\_\_

2. Why do the different elements have different numbers of energy levels? \_\_\_\_\_

\_\_\_\_\_

3. If an atom gained a neutron in its nucleus (became an isotope), predict —

a) Would the atomic number change? \_\_\_\_\_

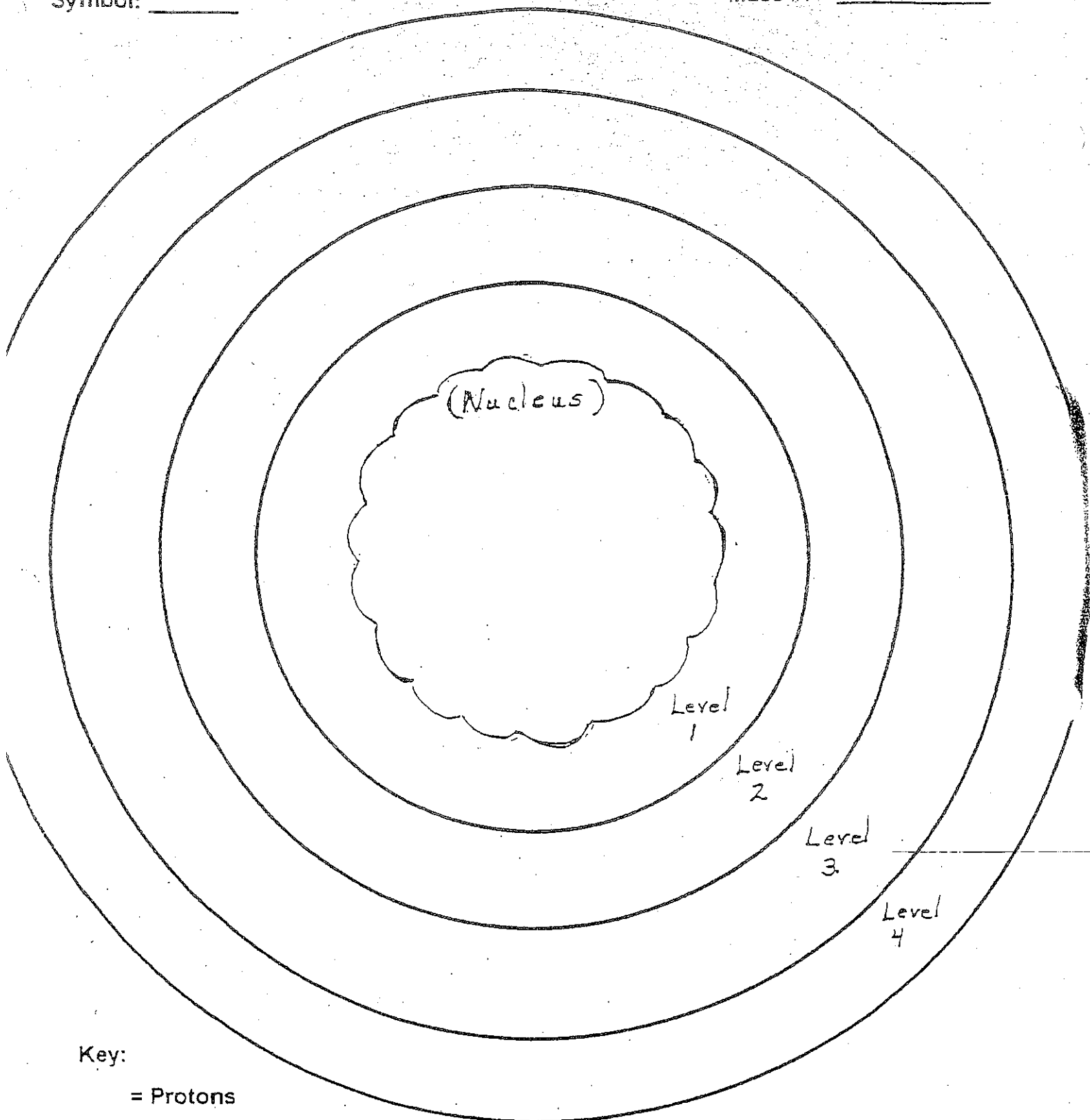
b) Would the atomic mass change? \_\_\_\_\_

c) Would it become ( a totally different element, or a different form of the same element )

Circle one

Symbol: \_\_\_\_\_

Mass #: \_\_\_\_\_



Key:

- = Protons
- = Neutrons
- = Electrons

Name \_\_\_\_\_