

# CHAPTER 18.1 Virtual LAB (Pg. 554)

## Atomic Structure and Chemical Bonds

How can you tell which elements form chemical bonds?

Name \_\_\_\_\_

**Question 1:** What are electron energy levels? Where are they located?

**Answer 1:**

**Question 2:** What is the maximum number of electrons that can be held in the first electron energy level of an atom? In the second energy level?

**Answer 2:**

**Question 3:** Which of the elements you modeled are stable? Why?

**Answer 3:**

**Question 4:** If two elements have same number of protons but different number of neutrons can they be atoms of the same element?

**Answer 4:**

# Atomic Structure and Chemical Bonds

## Atomic Structure

|  | Element Name | Atomic Number | Symbol | Atomic Mass | Mass Number | Number of Protons | Number of Neutrons | Number of Electrons | Will atom form chemical bonds with other atoms? |
|--|--------------|---------------|--------|-------------|-------------|-------------------|--------------------|---------------------|---|
|  | Element 1    |               |        |             |             |                   |                    |                     |   |
|  | Element 2    |               |        |             |             |                   |                    |                     |   |
|  | Element 3    |               |        |             |             |                   |                    |                     |   |
|  | Element 4    |               |        |             |             |                   |                    |                     |   |