

Electrons and Energy Levels

(Chapter 11, section 1)

Name _____
Period _____

1. What is a chemical bond?

2. a) What are energy levels?

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b) How many electrons can be in the lowest energy level? The second energy level?

3. What causes a chemical bond?

4. What are valence electrons?

5. a) Explain how to use the periodic table to determine the number of valence electrons in the atoms of groups 1, 2, and 13-18.

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b) Which element is an exception and how many valence electrons does it have?

6. What is an electron dot diagram?

7. Summarize the steps for writing electron dot diagrams.

8. a) When are atoms chemically stable? When are atoms chemically unstable?

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b) Which two atoms are exceptions and when are they chemically stable? Why?

9. What happens when an atom forms a bond? Why does this happen?