Metallic Bonding Quiz

<http://www.ck12.org/physical-science/Metallic-Bonding-in-Physical-Science/quiz/Metallic-Bonding-Quiz-MS-PS/?referrer=concept_details>

1. Define metallic bond.

2. Valence electrons of metals can move freely because metals have relatively low \_\_\_\_\_.

3. True or false: The lattice-like structure of a metal consists of negative metal ions in a “sea” of electrons.

**4. Properties of metals that are possible because of their freely moving electrons include the ability to**

a) conduct electricity. c) form hydrogen bonds.

b) bend without breaking. d) two of the above

**5. True or false: A metallic bond forms when one metal atom shares a pair of electrons with another metal atom.**

**6. True or false: Metallic bonds form only between atoms of two or more different metals.**

7. Metal atoms always form the type of ions called \_\_\_\_\_.

**8. In the lattice-like structure of a metal**

a) metal ions can move freely. c) pairs of ions and electrons can move freely.

b) valence electrons are in fixed positions. d) none of the above

**9. Which of the following elements form(s) metallic bonds?**

a) iron b) oxygen c) carbon d) two of the above

**10. Explain why only metallic elements form metallic bonds.**