

TEST NAME: **PSc 4.1 Intro to Bonding Spring 2018**
TEST ID: **2251180**
GRADE: **09 - Ninth Grade - 12 - Twelfth Grade**
SUBJECT: **Life and Physical Sciences**
TEST CATEGORY: **School Assessment**

Student: _____

Class: _____

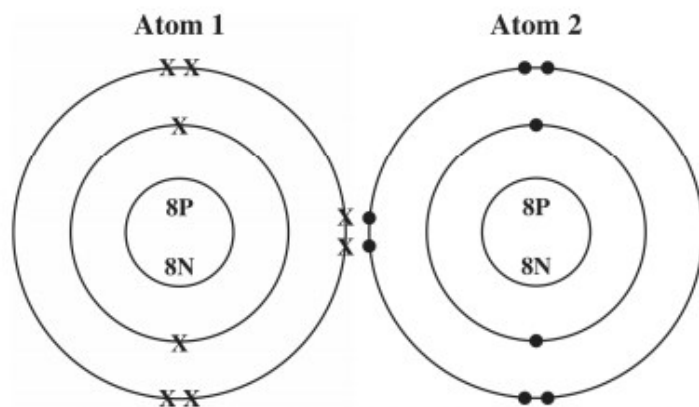
Date: _____

1. **Oxygen molecules are made up of two oxygen atoms. What is true about the oxygen molecule?**
 - A. Oxygen molecules share a double covalent bond.
 - B. Oxygen molecules have a definite shape.
 - C. Oxygen molecules share a pair of neutrons.
 - D. Oxygen molecules have two free electrons.

2. **In metallic bonds, which of the following are delocalized?**
 - A. electrons.
 - B. protons.
 - C. neutrons.
 - D. ions.

3. **Alkali metals are not found in their free state in nature. Their electron configurations contain one outer electron. Because they easily give up the outer electron, what type of bond do they typically form when they react with halogens?**
 - A. covalent
 - B. hydrogen
 - C. ionic
 - D. metallic

4. A model of two atoms is shown below.



Which of the following would result if a covalent bond is formed between the two atoms?

- A. Atom 1 would transfer 2 protons to atom 2.
 - B. Atom 2 would transfer 4 neutrons to atom 1.
 - C. Each atom would share two of its electrons with the other atom.
 - D. Each atom would share four of its electrons with the other atom.
5. A rod made of which element is **most likely** to bend without breaking?
- A. cobalt (Co)
 - B. silicon (Si)
 - C. iodine (I)
 - D. carbon (C)