

POLARITY – Short Answers

1. When two atoms participating in a covalent bond share their electrons UNEVENLY, is it a polar covalent bond or non-polar covalent bond.
2. When two atoms participating in a covalent bond share their electrons EVENLY, is it a polar covalent bond or non-polar covalent bond.
3. What type of a covalent bond is formed when each of the following pairs of atoms join together.
Carbon - Carbon?
Carbon – Hydrogen?
Oxygen – Hydrogen?
Nitrogen – Carbon?
Oxygen – Carbon?
Nitrogen – Hydrogen?
4. Is water a polar or non-polar molecule?
5. Which of the following classes of molecules are polar and which are non-polar? - Fats, Carbohydrates, Proteins, Nucleic Acids?
6. Are Carbon Dioxide and Oxygen gas polar or non-polar molecules?
7. Do polar molecules mix well with other polar molecules or do they mix better with non-polar molecules?
8. Are most molecules in the body polar or non-polar?
9. What is the only major class of molecules in the body that are Non-polar.

1. When two atoms participating in a covalent bond share their electrons UNEVENLY, is it a polar covalent bond or non-polar covalent bond.

Polar Covalent Bond

2. When two atoms participating in a covalent bond share their electrons EVENLY, is it a polar covalent bond or non-polar covalent bond.

Non-Polar Covalent Bond

3. What type of a covalent bond is formed when each of the following pairs of atoms join together.

Carbon – Carbon? **Non-Polar**

Carbon – Hydrogen? **Non-Polar**

Oxygen – Hydrogen? **Polar**

Nitrogen – Carbon? **Polar**

Oxygen – Carbon? **Polar**

Nitrogen – Hydrogen? **Polar**

4. Is water a polar or non-polar molecule?

Water is a polar molecule because it is composed of polar covalent bonds.

5. Which of the following classes of molecules are polar and which are non-polar? - Fats, Carbohydrates, Proteins, Nucleic Acids?

Fats are Non-Polar

Carbohydrates, Proteins and Nucleic Acids are Polar

6. Are Carbon Dioxide and Oxygen gas polar or non-polar molecules?

Non-Polar

7. Do polar molecules mix well with other polar molecules or do they mix better with non-polar molecules?

Polar molecules mix well with other polar molecules.

Non-polar molecules mix well with other non-polar molecules.

Polar and non-polar molecules do not mix well together.

8. Are most molecules in the body polar or non-polar?

Most molecules in the body are polar.

9. What is the only major class of molecules in the body that are Non-polar.

The only class of molecules in the body that is non-polar are fats.