

Name: _____ Date: _____

Do Carbon Atoms Like Cocoa? 3rd Grade Organic Chemistry Quiz

Students analyze molecular blueprints and compare carbon chains found in everything from chocolate treats to fluffy winter sweaters.

1. Imagine you are looking at a Lego set for building living things. Which 'brick' is the most important one used to build people, plants, and even your favorite snacks?

- A. Gold
- B. Carbon
- C. Silver
- D. Helium

2. True or False: Carbon atoms are so friendly that they can hold hands with up to four other atoms at the same time.

- A. True
- B. False

3. Natural vanilla flavor and the smell of a fresh orange are both types of _____ molecules because they contain carbon chains.

- A. Organic
- B. Metallic
- C. Rocky
- D. Frozen

4. Carbon atoms can link up in different shapes. If carbon atoms connect in a straight line like a train, what do scientists call this shape?

- A. A circle
- B. A pyramid
- C. A chain
- D. A star

5. True or False: All organic molecules must stay in a straight line and can never form a circle or a ring.

- A. True
- B. False

6. The soft wool in your winter sweater and the silk from a spider's web are both long, repeating organic chains called _____.

- A. Dust
- B. Polymers
- C. Crystals
- D. Gases

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7. Why do scientists study the way carbon atoms are arranged in a molecule?

- A. To change the color of the atom
- B. To see how many atoms weigh
- C. To understand how the molecule behaves
- D. To make the atoms grow bigger

8. True or False: Every single thing on Earth is made of organic carbon molecules, including rocks and steel.

- A. True
- B. False

9. When you eat a piece of fruit, your body breaks down an organic molecule called _____ to get the energy you need to play.

- A. Iron
- B. Salt
- C. Oxygen
- D. Sugar

10. Which of these is a real-world example of how humans use organic chemistry to create something new?

- A. Carving a stone statue
- B. Melting an ice cube
- C. Making medicine from plants
- D. Folding a piece of paper