

Name: _____ Date: _____

Do LEGOs and Leaves Share a Secret? Kindergarten Organic Chemistry Quiz

Evaluate molecular patterns through 10 interactive challenges focusing on carbon chains, biological building blocks, and polymer structures found in daily life.

1. Imagine you are building a very long train with carbon engine cars. If you want to make a 'polymer' snake, how should the cars be connected?

- A. In a long, repeating chain
- B. Piled in a messy heap
- C. Kept in separate boxes
- D. Only using one single car

2. Carbon is like a friendly octopus because it has ___ 'arms' (bonds) to hold onto its friends.

- A. Two
- B. Eight
- C. Four
- D. Zero

3. True or False: A diamond ring and a pencil lead are both made of the same 'Carbon' ingredient, just arranged in different patterns.

- A. True
- B. False

4. Look at a plastic milk jug and a piece of wood. Why are they both part of 'Organic Chemistry'?

- A. Because they both smell like flowers
- B. Because they both contain Carbon skeletons
- C. Because they are both blue
- D. Because they both sink in water

5. If you find a molecule shaped like a perfect circle (a ring), it might be called an ___ compound.

- A. Aromatic
- B. Broken
- C. Square
- D. Invisible

6. True or False: Every single molecule that contains Carbon is definitely alive.

- A. True
- B. False

7. Which of these is the 'backbone' that holds the instructions for your whole body together (DNA)?

- A. A metal wire

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- B. A carbon-based organic chain
- C. A cloud of steam
- D. A solid rock

8. When we burn organic fuel like wax in a candle, it reacts with oxygen to create heat and ____.

- A. Ice cubes
- B. Carbon Dioxide
- C. Green paint
- D. Gold coins

9. True or False: Scientists can use carbon to build tiny 'nanotube' elevators that are much stronger than steel.

- A. True
- B. False

10. If you change just one small part of an organic molecule (like moving a LEGO brick), what happens?

- A. It stays exactly the same
- B. It might turn into a totally different substance
- C. It disappears forever
- D. It turns into real LEGOs