

Name: _____ Date: _____

Carbon Critters: 5th Grade Chemistry Cupcake Challenge

Beyond simple memorization — learners identify carbon's role in living things and common household items. Perfect for an engaging science center or quick bell-ringer.

1. Carbon is so special because it acts like a 'Lego brick' that can build huge structures. What is the most common shape carbon atoms form in a long row?

- A. A perfect circle
- B. A long chain
- C. A flat triangle
- D. A single dot

2. True or False: Living things, like trees and humans, are made of organic carbon molecules.

- A. True
- B. False

3. Which of these is a common 'organic' material we use every day that is made of carbon and hydrogen?

- A. Glass windows
- B. Steel spoons
- C. Plastic bottles
- D. Salt crystals

4. If you look at the 'spine' of an organic molecule, which element will you always find there?

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

5. True or False: Diamonds are made of the same element (carbon) as the graphite in your pencil.

- A. True
- B. False

6. Organic molecules often contain carbon and what other common gas element?

- A. Neon
- B. Hydrogen
- C. Argon
- D. Silver

7. What is the name for a molecule that is shaped like a closed circle instead of a straight line?

- A. A square
- B. A ring

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- C. A zig-zag
- D. A pyramid

8. True or False: Organic chemistry only studies things that are found in a science lab.

- A. True
- B. False

9. Which of these is a natural source of carbon compounds used for energy?

- A. Moonlight
- B. Crude oil
- C. Sand
- D. Gold nuggets

10. Why is carbon considered the 'friendly' element in organic chemistry?

- A. It can bond with many other atoms at once
- B. It smells like flowers
- C. It is always a liquid
- D. It glows in the dark