Name: _____ **Date:** _____

Answer Key: Sticking Like Honey: Organic Chemistry K-6 Chains Quiz

Tiny investigators build molecular necklaces and track carbon's sticky path as a hands-on introduction to the building blocks of living things.

---

1. Carbon is a very 'friendly' atom that loves to hold hands with others. When carbon atoms hold hands in a long line, what does it look like?

Answer: C) A long chain

In organic chemistry, carbon atoms often bond together in long strings called chains, much like beads on a necklace.

2. Most things that were once alive, like a wooden stick or a fallen leaf, are made of ___ chemistry.

Answer: B) Organic

Organic chemistry is the study of carbon-based life. If something grew from the earth or was part of a living thing, it involves organic molecules.

3. Carbon atoms can connect together to make a shape that looks like a ring or a circle.

Answer: A) True

Carbon atoms are very flexible! They can form straight lines (chains) or close up to form circles (rings).

4. Think about a sweet strawberry. What organic 'fuel' is inside the fruit that gives your body energy?

Answer: D) Sugar

Sugar (like glucose) is a famous organic molecule made of carbon, hydrogen, and oxygen that provides energy for living things.

5. All organic things must have the atom called Carbon inside them.

Answer: A) True

Carbon is the 'main character' of organic chemistry. Without carbon, a molecule cannot be called organic.

6. Carbon is very strong. It can build hard things like a diamond or soft things like ___.

Answer: A) Plastic

Name: _____ **Date:** _____

Many man-made materials like plastic are organic because they are made of long carbon chains, often starting from oil found underground.

7. Which of these acts like a 'glue' that keeps atoms together in an organic molecule?

Answer: B) Bonds

Chemical bonds are the 'connections' or 'handshakes' between atoms that hold them together to form molecules.

8. If you look at a molecule that has only Carbon and Hydrogen, we call it a ___.

Answer: A) Hydrocarbon

Hydrocarbons are simple organic molecules named after the two things they are made of: Hydrogen and Carbon.

9. An organic scientist is someone who only studies rocks and volcanoes.

Answer: B) False

Organic chemists study life-based molecules. Scientists who study rocks are called geologists.

10. Carbon can share 4 'handshakes' at once. Why is this helpful for building life?

Answer: C) It can build very complex shapes

Since carbon can connect in four directions, it can build incredible shapes like webs, trees, and cages, which is perfect for building complex bodies.