

Name: _____ Date: _____

Stuck Like Magic: Chemical Bonds for 3rd Grade Alchemists

Can you unravel the sticky secrets of the tiny world? Use glue-like science to build sugar cubes and shiny diamonds while exploring matter.

1. Imagine two nitrogen atoms decide to 'hold hands' by sharing their outer parts to stay together.

What kind of bond is this?

- A. A magnetic pull
- B. A covalent bond
- C. A gravity glue
- D. A physical knot

2. True or False: Atoms act like tiny building blocks that can snap together to make everything we see.

- A. True
- B. False

3. When a silver spoon is made, many silver atoms share a big 'pool' of moving parts. This is called a _____ bond.

- A. Freezing
- B. Icy
- C. Metallic
- D. Rubber

4. If an atom 'gives away' a part of itself to another atom so they both become charged and stick together, it creates what?

- A. An ionic bond
- B. A covalent bond
- C. A paper bond
- D. A hidden bond

5. Sugar crystals are held together by atoms sharing electrons. This means sugar is a _____ compound.

- A. Metallic
- B. Covalent
- C. Magnetic
- D. Gaseous

6. True or False: In a metallic bond, the atoms are held together loosely like a pile of dry sand.

- A. True
- B. False

7. Why do atoms bother to form bonds in the first place?

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- A. To change their color
- B. To become bigger
- C. To become more stable and happy
- D. To get hotter

8. Lithium fluoride is a type of salt. Because it is made of atoms that transferred electrons, its bond type is _____.

- A. Ionic
- B. Liquid
- C. Airy
- D. Wobbly

9. True or False: A diamond is very hard because the carbon atoms inside are locked together by covalent bonds.

- A. True
- B. False

10. Which of these acts most like an ionic bond?

- A. Two friends sharing a single cookie
- B. A person giving a ball to a friend, then standing close to them
- C. Many people swimming in the same pool
- D. Two people ignoring each other