

Name: _____

Date: _____

"Unlocking the Secrets of Matter: A 20-Question Challenge for 7th Graders!"

1. Which of the following is a characteristic of a solid?

- ☐ a Has no fixed volume
- ☐ b Flows easily
- ☐ c Takes the shape of its container
- ☐ d Definite shape

2. A gas has a definite volume but no definite shape.

- ☐ a True
- ☐ b False

3. What is the process called when a solid turns into a liquid?

4. What is the smallest unit of an element?

- ☐ a Ion
- ☐ b Atom
- ☐ c Compound
- ☐ d Molecule

5. Which of the following are pure substances?

(Select all that apply)

- ☐ a Salt
- ☐ b Gold
- ☐ c Water
- ☐ d Air

6. All gases have a definite shape and volume.

- ☐ a True
- ☐ b False

7. What do you call a mixture where you can see the different parts?

8. Which state of matter expands to fill its container?

- ☐ a Gas
- ☐ b Plasma
- ☐ c Solid
- ☐ d Liquid

9. Which of the following are changes of state?

(Select all that apply)

- ☐ a Evaporation
- ☐ b Melting
- ☐ c Sublimation
- ☐ d Condensation

10. A liquid has a definite volume and shape.

- ☐ a True
- ☐ b False

11. Name a property that is common to all gases.

12. What type of matter is made of two or more different elements?

- ☐ a Solution
- ☐ b Element
- ☐ c Compound
- ☐ d Mixture

13. Which of the following can be considered as a solution?

(Select all that apply)

- ☐ a Air
- ☐ b Oil and water
- ☐ c Sugar water
- ☐ d Saltwater

14. An element can be broken down into simpler substances.

- ☐ a True
- ☐ b False

15. What is the term for a substance that cannot be separated into simpler substances?

16. Which of the following is NOT a state of matter?

- ☐ a Gas
- ☐ b Energy
- ☐ c Solid
- ☐ d Liquid

17. Which of the following are properties of solids?

(Select all that apply)

- ☐ a Fluidity
- ☐ b Definite shape
- ☐ c Definite volume
- ☐ d Incompressibility

18. A compound is a type of mixture.

- ☐ a True
- ☐ b False

19. What happens to particles in a solid when it melts?
