1ST QUARTERLY ASSESSMENT SCIENCE 7

SY 2025-2026

Name:	Date:
Section:	Teacher:

DIRECTION: Read each question carefully. Choose the letter of the best answer from the given choices.

- 1. Which of the following best describes the particles in a solid?
- A. Closely packed and vibrating in place
- B. Far apart and moving randomly
- C. Slightly spread and flowing past each other
- D. Moving in straight lines and bouncing off each other
- 2. What state of matter has particles that move freely and are far apart?
- A. Solid
- B. Liquid
- C. Gas
- D. Plasma
- 3. Why can liquids take the shape of their container but not expand to fill it?
- A. Their particles are tightly fixed
- B. Their particles are far apart
- C. Their particles slide past each other but remain close
- D. Their particles are not affected by forces
- 4. Which statement correctly compares the motion of particles in solids, liquids, and gases?
- A. Particles in all three states move at the same speed
- B. Solid particles move the most; gas particles move the least
- C. Gas particles move the fastest, while solid particles vibrate in place
- D. Liquid particles do not move
- 5. A student observed that perfume spreads quickly in the air. What does this observation show?
- A. Solids do not move
- B. Liquids change shape
- C. Gases have high particle attraction
- D. Gas particles move fast and spread out easily
- 6. You placed a solid ice cube in a warm room. Over time, it melted and evaporated. What does this demonstrate about particles?
- A. They always remain in one state
- B. They stop moving after melting
- C. They change arrangement and motion depending on the state

- D. They break apart into atoms
- 7. Which of the following is a physical property of a material?
- A. Boiling point
- B. Ability to burn
- C. Ability to rust
- D. Reactivity with acid
- 8. What property refers to how a material feels when touched?
- A. Odor
- B. Hardness
- C. Texture
- D. Color
- 9. A student describes a rock as black, rough, and hard. What is the student identifying?
- A. Uses of the rock
- B. The chemical properties
- C. The rock's location
- D. The physical properties
- 10. Which of the following materials is most likely to have a strong odor?
- A. Stone
- B. Vinegar
- C. Glass
- D. Sand
- 11. You are testing three unknown powders. One feels smooth, one is coarse, and one has a strong smell. What are you doing?
- A. Identifying volume
- B. Measuring temperature
- C. Observing physical properties
- D. Testing chemical reactivity
- 12. Which property would you most likely test by pressing a fingernail into a material?
- A. Odor
- B. Color
- C. Hardness
- D. Texture
- 13. Which of the following is an example of a physical change?
- A. Burning wood
- B. Rusting of iron
- C. Melting of ice
- D. Cooking an egg
- 14. What happens in a chemical change?
- A. The substance stays the same

- B. A new substance is formed
- C. The shape changes only
- D. It can be easily reversed
- 15. Which best explains why rusting is a chemical change?
- A. The metal changes shape
- B. Water evaporates from the metal
- C. A new substance (rust) is formed
- D. The metal melts due to heat
- 16. Why is breaking a glass considered a physical change?
- A. It forms a new chemical
- B. It produces a gas
- C. Only the appearance changes
- D. It changes color permanently
- 17. You observe bubbles forming as vinegar is mixed with baking soda.

What does this suggest?

- A. It's a physical change
- B. It's a chemical change producing gas
- C. The baking soda evaporated
- D. Nothing happened
- 18. Your classmate burned a piece of paper, and it turned into ash and smoke. What type of change occurred?
- A. Physical
- B. Reversible
- C. Chemical
- D. Temporary
- 19. What is a solution?
- A. A pure substance made of two elements
- B. A mixture where substances are evenly distributed
- C. A solid metal object
- D. A combination of solids and gases only
- 20. Which of the following is a mixture?
- A. Distilled water
- B. Table salt
- C. Vinegar and soy sauce combined
- D. Oxygen gas
- 21. Why is salt water considered a solution?
- A. Because salt and water react chemically
- B. Because salt settles at the bottom
- C. Because salt is visible in the water
- D. Because the salt dissolves evenly in water
- 22. What best distinguishes a mixture from a compound?

- A. Mixtures have new properties
- B. Mixtures can be separated physically
- C. Compounds are not made of atoms
- D. Mixtures are always gases
- 23. You are asked to separate sand from saltwater. Which method is most appropriate?
- A. Evaporation
- B. Distillation
- C. Filtration
- D. Condensation
- 24. Your group is given a bowl of nuts, candies, and dried fruits. How would you classify the contents?
- A. A compound
- B. A homogeneous mixture
- C. A solution
- D. A heterogeneous mixture
- 25. Which of the following is a property of acids?
- A. Bitter taste
- B. Soapy texture
- C. Sour taste
- D. Slippery feel
- 26. Which substance is likely to be basic?
- A. Vinegar
- B. Lemon juice
- C. Baking soda solution
- D. Apple juice
- 27. How can you identify a base using litmus paper?
- A. It turns blue to red
- B. It turns red to blue
- C. It changes to green
- D. It does not change color
- 28. Why are acids and bases important in daily life?
- A. They make food unsafe
- B. They can only be used in laboratories
- C. They are found in many household products
- D. They are not used by most people
- 29. A student accidentally mixes lemon juice with soap. What type of substances did the student combine?
- A. Two acids
- B. Two bases
- C. An acid and a base
- D. Two neutral substances

- 30. You are testing a solution using red litmus paper, and it turns blue.
- What can you conclude?
- A. The solution is neutral
- B. The solution is an acid
- C. The solution is a base
- D. The solution is water
- 31. What is an element?
- A. A mixture of substances
- B. A pure substance made of one kind of atom
- C. A combination of atoms from different substances
- D. A substance made of two or more compounds
- 32. Which of the following is a compound?
- A. Oxygen
- B. Hydrogen
- C. Water
- D. Gold
- 33. Why is water a compound and not an element?
- A. It cannot be separated
- B. It has only one atom
- C. It is made of two different elements chemically combined
- D. It is found in nature
- 34. Which statement is true about elements and compounds?
- A. Elements can be broken down into simpler substances
- B. Compounds have only one kind of atom
- C. Elements are made of only one type of atom, compounds of two or more
- D. Both are mixtures
- 35. You are given a sample of salt (NaCl). How would you classify it?
- A. Element
- B. Mixture
- C. Compound
- D. Gas
- 36. You need to separate a compound into its elements. Which of the following is correct?
- A. It can be done by physical means
- B. It cannot be done
- C. It requires a chemical process
- D. It happens by filtering
- 37. Which of the following is a property of most metals?
- A. Dull and brittle
- B. Good conductor of electricity
- C. Poor conductor of heat

- D. Soft and powdery
- 38. What property is commonly seen in nonmetals?
- A. Shiny surface
- B. High electrical conductivity
- C. Brittle when solid
- D. Malleable and ductile
- 39. Why is copper used in electrical wiring?
- A. It is brittle and breaks easily
- B. It is shiny
- C. It conducts electricity very well
- D. It reacts with all acids
- 40. Which of the following shows the difference between metals and nonmetals?
- A. Metals are softer than nonmetals
- B. Nonmetals are always heavier than metals
- C. Metals conduct electricity; nonmetals usually do not
- D. Both have the same properties
- 41. You are asked to build a cooking pot. Which material would be most suitable based on its properties?
- A. Wood
- B. Rubber
- C. Plastic
- D. Aluminum
- 42. Which material is most likely a nonmetal based on its poor conductivity and dull surface?
- A. Iron
- B. Gold
- C. Sulfur
- D. Silver
- 43. What are metalloids?
- A. Elements that have only metallic properties
- B. Elements that have only nonmetallic properties
- C. Elements that have properties of both metals and nonmetals
- D. Elements that cannot be classified
- 44. Which of the following is a metalloid?
- A. Silicon
- B. Gold
- C. Oxygen
- D. Sodium
- 45. Why are metalloids used in electronic devices?
- A. They are heavy and reactive

- B. They conduct electricity better than nonmetals but not as well as metals
- C. They are shiny and soft
- D. They are brittle and flammable
- 46. What makes metalloids different from metals and nonmetals?
- A. They cannot change states
- B. They are radioactive
- C. They have mixed properties from both groups
- D. They are gases at room temperature
- 47. You are designing a device that needs a material with partial conductivity. Which should you choose?
- A. Iron
- B. Silicon
- C. Sulfur
- D. Mercury
- 48. Which observation supports classifying boron as a metalloid?
- A. It is a liquid
- B. It is a good insulator
- C. It is shiny and brittle, and semi-conductive
- D. It reacts violently with water
- 49. You are asked to design a container for a substance that changes from solid to liquid easily and gives off a strong odor. Based on what you've learned about states and properties of matter, which feature should the container have?
- A. It should be made of metal and have holes for air flow.
- B. It should be sealed and made of non-reactive material.
- C. It should be clear and open at the top.
- D. It should be made of cloth to absorb liquid.
- 50. A company needs a material that is solid, shiny, conducts electricity, and can be bent into wires. Which type of element should they choose?
- A. Nonmetal
- B. Metalloid
- C. Gas
- D. Metal

ANSWER KEY:

- 1. A
- 2. C
- 3. C
- 4. C
- 5. D
- 6. C
- 7. A
- 8. C
- 9. D
- 10. B
- 11. C
- 12. C
- 14.
- 13. C
- 14. B
- 15. C
- 16. C
- 17. B
- 18. C
- 19. B
- 20. C
- 21. D
- 22. B
- 23. C
- 24. D
- 25. C
- 26. C
- 27. B
- 28. C
- 29. C
- 30. C
- 31. B
- 32. C
- 33. C
- 34. C
- 35. C
- 36. C
- 37. B
- 38. C
- 39. C
- 40. C
- 41. D
- 42. C
- 43. C
- 44. A
- 45. B46. C
- 47. B

- 48. C
- 49. B
- 50. D