



# Myfuture CBC Revision

## Science - GRADE 8

### Question Paper

1. Which of the following is a mixture?

- A. Oxygen
- B. Iron
- C. Brass
- D. Copper

2. When a hammer strikes a nail, what type of energy transformation occurs?

- A. Heat to sound energy
- B. Mechanical to kinetic energy
- C. Chemical to mechanical energy
- D. Mechanical to sound energy

3. What is the term for the uptake of small droplets of extracellular fluid by the cell?

- A. Exocytosis
- B. Phagocytosis
- C. Pinocytosis
- D. Endocytosis

4. Which type of molecule contains covalent bonds and does not dissociate into ions in water?

- A. Ionic compound
- B. Polar compound
- C. Covalent compound
- D. Metallic compound

5. What happens to the energy conversion during friction?

- A. Energy is wasted as heat
- B. Energy is converted into light
- C. Energy is destroyed
- D. Energy is created

6. Which organelle is responsible for breaking down substances like old organelles and foreign substances?

- A. Lysosomes
- B. Endoplasmic reticulum
- C. Ribosomes
- D. Vacuoles

7. Which of the following is a function of the cell membrane in regards to movement of materials?

- A. Providing structural support
- B. Regulating temperature
- C. Producing energy
- D. Controlling passage of substances

8. What is the relationship between pressure and altitude in a column of liquid?

- A. Pressure remains constant with altitude
- B. Pressure increases with altitude
- C. Pressure decreases with altitude
- D. Pressure becomes zero at the top

9. Which organelle is responsible for detoxifying harmful substances in the cell?

- A. Lysosomes
- B. Endoplasmic reticulum
- C. Vacuoles
- D. Golgi apparatus

10. How does the number of protons in an atom's nucleus compare to the number of electrons?

- A. No relation
- B. Equal
- C. Protons are more
- D. Electrons are more

11. What is the primary function of oxygen in the human body?

- A. Enables circulation
- B. Facilitates respiration
- C. Supports digestion
- D. Aids in vision

12. What is the process of adding oxygen to a substance called?

- A. Reduction
- B. Decomposition
- C. Fermentation
- D. Oxidation

13. Which of the following factors affects pressure?

- A. Color of an object
- B. Weight of an object
- C. Material of an object
- D. Shape of an object

14. What is pressure?

- A. Acceleration of an object
- B. Amount of heat energy in a system
- C. Speed of an object
- D. Force applied per unit area

15. What is the relationship between pressure and altitude in the Earth's atmosphere?

- A. Pressure becomes zero at the top
- B. Pressure increases with altitude
- C. Pressure decreases with altitude
- D. Pressure remains constant with altitude

16. Which of the following is an element?

- A. Carbon Dioxide
- B. Copper
- C. Vinegar
- D. Methane

17. Which state of matter has both a definite shape and a definite volume?

- A. Solid
- B. Gas
- C. Liquid
- D. Plasma

18. What happens to pressure as the area over which a force is applied increases?

- A. Pressure remains the same
- B. Pressure increases
- C. Pressure is not affected
- D. Pressure decreases

19. Which state of matter has the strongest intermolecular forces holding its particles together?

- A. Gas
- B. Liquid
- C. Plasma
- D. Solid

20. Which compound is commonly used in the production of plastics, lubricants, and synthetic fibers?

- A. Sodium bicarbonate
- B. Ethylene
- C. Potassium nitrate
- D. Ammonium chloride

21. What is the name of the region around the nucleus where electrons are likely to be found?

- A. Shell
- B. Electron cloud
- C. Energy level
- D. Orbit

22. What is the role of the ribosomes in a cell?

- A. Synthesize proteins
- B. Store genetic material
- C. Produce energy
- D. Regulate cell movement

23. Which subatomic particle carries a negative charge?

- A. Nucleus
- B. Neutron
- C. Electron
- D. Proton

24. Which of the following factors affects the pressure exerted by a gas?

- A. Color
- B. Shape
- C. Sound
- D. Temperature

25. Which subatomic particle has a negative charge?

- A. Neutron
- B. Electron
- C. Nucleus
- D. Proton

26. What is the chemical formula for water?

- A. H<sub>2</sub>O
- B. NaCl
- C. C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>
- D. CO<sub>2</sub>

27. What is the name of the particles that make up atoms?

- A. Subatomic particles
- B. Molecules
- C. Compounds
- D. Orbitals

28. Which subatomic particle is responsible for the chemical behavior of an atom?

- A. Molecule
- B. Neutron
- C. Proton
- D. Electron

29. Which element is commonly found in the Earth's crust as a component of minerals such as gypsum and calcium carbonate?

- A. Calcium
- B. Sodium
- C. Potassium
- D. Magnesium

30. How many electrons can occupy the first energy level of an atom?

- A. 4
- B. 8
- C. 6
- D. 2

31. Which of the following is an example of an element?

- A. Salt
- B. Sugar
- C. Oxygen
- D. Water

32. Which of the following is a compound?

- A. Helium
- B. Neon
- C. Hydrogen
- D. Ammonia

33. Which organelle is responsible for producing proteins in a cell?

- A. Endoplasmic reticulum
- B. Vacuole
- C. Golgi apparatus
- D. Lysosome

34. Which of the following is NOT a compound?

- A. Oxygen
- B. Water
- C. Calcium Carbonate (limestone)
- D. Aluminum Oxide

35. Which of the following substances requires energy to move them across the cell membrane?

- A. Oxygen
- B. Glucose
- C. Water
- D. Carbon dioxide

36. What is the arrangement of electrons around the nucleus of an atom called?

- A. Nucleus
- B. Electron cloud
- C. Electron shells
- D. Energy levels

37. Which state of matter has the least energy and the particles are arranged in a fixed, orderly structure?

- A. Solid
- B. Liquid
- C. Gas
- D. Plasma

38. In which direction does pressure act in a fluid?

- A. Opposite to the force applied
- B. In all directions
- C. Only upwards
- D. Only downwards

39. Which state of matter has the ability to conduct electricity due to the presence of free electrons?

- A. Plasma
- B. Gas
- C. Liquid
- D. Solid

40. The movement of molecules from an area of high concentration to an area of low concentration is known as?

- A. Active transport
- B. Osmosis
- C. Endocytosis
- D. Diffusion

41. Which organelle is responsible for maintaining genetic material and controlling cell activities?

- A. Endoplasmic reticulum
- B. Cell membrane
- C. Nucleus
- D. Lysosomes

42. What is a compound made up of?

- A. A mixture of elements
- B. A single element
- C. Two or more elements chemically bonded together
- D. Compounds are not made up of anything

43. Which organelle is responsible for generating vesicles that transport molecules throughout the cell?

- A. Endoplasmic reticulum
- B. Lysosomes
- C. Golgi apparatus
- D. Vacuoles

44. How many electrons can the first energy level of an atom hold?

- A. 10
- B. 8
- C. 2
- D. 6

45. Which compound is known for its role in protecting Earth from harmful ultraviolet radiation?

- A. Ozone
- B. Propane
- C. Acetone
- D. Sunscreen

46. What is the SI unit of pressure?

- A. Meter
- B. Newton
- C. Pascal
- D. Second

47. Which state of matter has a definite volume but not a definite shape?

- A. Solid
- B. Liquid
- C. Gas
- D. Plasma

48. What is the fluid inside a cell where organelles are suspended called?

- A. Cell wall
- B. Cell membrane
- C. Cytoplasm
- D. Nucleus

49. What is the smallest unit of a compound that retains the properties of that compound?

- A. Particle
- B. Element
- C. Atom
- D. Molecule

50. During respiration, what type of energy transformation takes place in living organisms?

- A. Light to chemical energy
- B. Chemical to electrical energy
- C. Chemical to mechanical energy
- D. Electrical to mechanical energy

