



# **Junior High Science Study Guide**

## 100 questions

### Earth and Space Science

1. **What is the term for the movement of tectonic plates?**
  - a) Subduction
  - b) Erosion
  - c) Plate tectonics
  - d) Mantle convection**Correct Answer:** c) Plate tectonics
2. **What do we call the process of water changing from liquid to gas?**
  - a) Precipitation
  - b) Condensation
  - c) Evaporation
  - d) Transpiration**Correct Answer:** c) Evaporation
3. **What layer of the atmosphere contains the ozone layer?**
  - a) Troposphere
  - b) Stratosphere
  - c) Mesosphere
  - d) Thermosphere**Correct Answer:** b) Stratosphere
4. **What is the term for a break in the Earth's crust where movement has occurred?**
  - a) Fault
  - b) Rift
  - c) Subduction zone
  - d) Trench**Correct Answer:** a) Fault
5. **What do we call molten rock beneath the Earth's surface?**
  - a) Lava
  - b) Basalt
  - c) Granite
  - d) Magma**Correct Answer:** d) Magma
6. **What is the term for the average weather conditions of a region over a long period?**
  - a) Weather
  - b) Climate
  - c) Precipitation
  - d) Humidity**Correct Answer:** b) Climate
7. **What is the name of the process that changes rock into sediment?**
  - a) Erosion
  - b) Weathering

- c) Deposition
- d) Compaction

**Correct Answer:** b) Weathering

8. **What is the term for the movement of sediment by wind, water, or ice?**

- a) Deposition
- b) Erosion
- c) Sedimentation
- d) Transport

**Correct Answer:** b) Erosion

9. **What is the process by which plants release water vapor into the air?**

- a) Evaporation
- b) Transpiration
- c) Condensation
- d) Photosynthesis

**Correct Answer:** b) Transpiration

10. **What is the name of the galaxy that contains our solar system?**

- a) Andromeda
- b) Milky Way
- c) Triangulum
- d) Orion

**Correct Answer:** b) Milky Way

---

## Physical Science

11. **What is the term for the amount of matter in an object?**

- a) Weight
- b) Mass
- c) Volume
- d) Density

**Correct Answer:** b) Mass

12. **What do we call the energy of motion?**

- a) Potential energy
- b) Thermal energy
- c) Kinetic energy
- d) Chemical energy

**Correct Answer:** c) Kinetic energy

13. **What is the term for a push or pull on an object?**

- a) Force
- b) Friction
- c) Momentum
- d) Acceleration

**Correct Answer:** a) Force

14. **What is the term for the ability to do work?**

- a) Energy
- b) Force
- c) Power
- d) Momentum

**Correct Answer:** a) Energy

15. **What do we call materials that allow electricity to flow easily?**

- a) Insulators
- b) Conductors
- c) Resistors
- d) Magnets

**Correct Answer:** b) Conductors

16. **What is the term for the bending of light as it passes through a medium?**

- a) Reflection
- b) Refraction
- c) Diffusion
- d) Scattering

**Correct Answer:** b) Refraction

17. **What is the term for the amount of space an object occupies?**

- a) Mass
- b) Volume
- c) Density
- d) Weight

**Correct Answer:** b) Volume

18. **What is the measure of the amount of matter in a given volume?**

- a) Weight
- b) Density
- c) Mass
- d) Volume

**Correct Answer:** b) Density

19. **What is the term for the stored energy in an object?**

- a) Kinetic energy
- b) Potential energy
- c) Mechanical energy
- d) Thermal energy

**Correct Answer:** b) Potential energy

20. **What do we call the smallest unit of an element?**

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

**Correct Answer:** a) Atom

---

## Life Science

21. **What is the process by which plants make their own food?**

- a) Respiration
- b) Photosynthesis
- c) Transpiration
- d) Fermentation

**Correct Answer:** b) Photosynthesis

22. **What is the basic unit of life?**

- a) Atom
- b) Cell
- c) Tissue
- d) Organ

**Correct Answer:** b) Cell

23. **What do we call an organism that eats both plants and animals?**

- a) Carnivore
- b) Herbivore
- c) Omnivore
- d) Decomposer

**Correct Answer:** c) Omnivore

24. **What is the term for the physical characteristics of an organism?**

- a) Genotype
- b) Phenotype
- c) Chromosome
- d) DNA

**Correct Answer:** b) Phenotype

25. **What do we call the process by which cells divide to produce two identical daughter cells?**

- a) Meiosis
- b) Fertilization
- c) Mitosis
- d) Replication

**Correct Answer:** c) Mitosis

26. **What is the term for an organism that breaks down dead material?**

- a) Producer
- b) Consumer
- c) Predator
- d) Decomposer

**Correct Answer:** d) Decomposer

27. **What is the process by which animals release energy from food?**

- a) Photosynthesis
- b) Cellular respiration
- c) Fermentation

d) Digestion

**Correct Answer:** b) Cellular respiration

28. **What do we call the part of the cell that contains genetic information?**

a) Cytoplasm

b) Nucleus

c) Membrane

d) Mitochondria

**Correct Answer:** b) Nucleus

29. **What is the term for a living thing that can produce its own food?**

a) Consumer

b) Producer

c) Decomposer

d) Omnivore

**Correct Answer:** b) Producer

30. **What is the term for the passing of traits from parents to offspring?**

a) Evolution

b) Mutation

c) Heredity

d) Adaptation

**Correct Answer:** c) Heredity

---

## **Ecosystems and Environment**

31. **What is the term for all the living and nonliving things in an area?**

a) Habitat

b) Ecosystem

c) Population

d) Community

**Correct Answer:** b) Ecosystem

32. **What do we call a group of the same species living in an area?**

a) Habitat

b) Population

c) Ecosystem

d) Community

**Correct Answer:** b) Population

33. **What is the term for the role an organism plays in its environment?**

a) Habitat

b) Ecosystem

c) Niche

d) Community

**Correct Answer:** c) Niche

34. **What is the term for the interaction where one organism benefits and the other is harmed?**

- a) Symbiosis
- b) Mutualism
- c) Commensalism
- d) Parasitism

**Correct Answer:** d) Parasitism

35. **What is the term for the maximum number of individuals an environment can support?**

- a) Population size
- b) Carrying capacity
- c) Ecosystem limit
- d) Community size

**Correct Answer:** b) Carrying capacity

## **Energy and Matter**

36. **What is the term for the process of changing one form of energy into another?**

- a) Energy transformation
- b) Energy conservation
- c) Energy transfer
- d) Energy dissipation

**Correct Answer:** a) Energy transformation

37. **What is the term for the movement of heat through a solid material?**

- a) Conduction
- b) Convection
- c) Radiation
- d) Insulation

**Correct Answer:** a) Conduction

38. **What is the term for energy that is stored in the bonds of chemical compounds?**

- a) Mechanical energy
- b) Thermal energy
- c) Chemical energy
- d) Kinetic energy

**Correct Answer:** c) Chemical energy

39. **What is the law that states energy cannot be created or destroyed, only transformed?**

- a) Law of Energy Conservation
- b) Newton's First Law
- c) Law of Thermodynamics
- d) Law of Motion

**Correct Answer:** a) Law of Energy Conservation

40. **What is the term for the process where matter changes from a liquid to a solid?**

- a) Evaporation

- b) Melting
  - c) Freezing
  - d) Condensation
- Correct Answer:** c) Freezing
- 

## Earth Science

41. **What is the term for the shaking of the Earth's surface caused by the movement of tectonic plates?**
- a) Erosion
  - b) Earthquake
  - c) Volcano
  - d) Landslide
- Correct Answer:** b) Earthquake
42. **What is the term for the opening in Earth's crust through which lava flows?**
- a) Rift
  - b) Crater
  - c) Volcano
  - d) Fault
- Correct Answer:** c) Volcano
43. **What is the name for the process of water cycling between the atmosphere, land, and oceans?**
- a) Water filtration
  - b) Water cycle
  - c) Hydrosphere cycle
  - d) Ocean circulation
- Correct Answer:** b) Water cycle
44. **What is the term for a large, slow-moving mass of ice on land?**
- a) Iceberg
  - b) Glacier
  - c) Permafrost
  - d) Ice sheet
- Correct Answer:** b) Glacier
45. **What is the term for the layer of Earth where life exists?**
- a) Lithosphere
  - b) Hydrosphere
  - c) Atmosphere
  - d) Biosphere
- Correct Answer:** d) Biosphere
-



## Forces and Motion

46. **What is the term for the resistance an object encounters when moving over another surface?**

- a) Friction
- b) Gravity
- c) Inertia
- d) Tension

**Correct Answer:** a) Friction

47. **What is the term for the rate at which an object changes its position?**

- a) Speed
- b) Velocity
- c) Acceleration
- d) Momentum

**Correct Answer:** b) Velocity

48. **What is the tendency of an object to resist a change in motion called?**

- a) Momentum
- b) Friction
- c) Gravity
- d) Inertia

**Correct Answer:** d) Inertia

49. **What is the term for the force that pulls objects toward each other?**

- a) Friction
- b) Magnetism
- c) Gravity
- d) Momentum

**Correct Answer:** c) Gravity

50. **What is the measure of the amount of force applied over a given area?**

- a) Mass
- b) Volume
- c) Pressure
- d) Density

**Correct Answer:** c) Pressure

---

## Earth's Resources

51. **What is the term for a resource that can be replaced naturally over time?**

- a) Fossil fuel
- b) Nonrenewable resource
- c) Renewable resource
- d) Mineral

**Correct Answer:** c) Renewable resource

**52. What is the term for the burning of fossil fuels to release energy?**

- a) Combustion
- b) Erosion
- c) Deposition
- d) Photosynthesis

**Correct Answer:** a) Combustion

**53. What is the term for the process of turning used materials into new products?**

- a) Decomposition
- b) Recycling
- c) Replenishing
- d) Manufacturing

**Correct Answer:** b) Recycling

**54. What is the term for the process of extracting minerals from the Earth?**

- a) Drilling
- b) Quarrying
- c) Mining
- d) Excavation

**Correct Answer:** c) Mining

**55. What is the term for a natural resource that cannot be replaced once it is used up?**

- a) Renewable resource
- b) Nonrenewable resource
- c) Fossil fuel
- d) Biomass

**Correct Answer:** b) Nonrenewable resource

---

## **Life Science (Additional Topics)**

**56. What is the term for an organism that feeds on another organism?**

- a) Decomposer
- b) Producer
- c) Consumer
- d) Predator

**Correct Answer:** d) Predator

**57. What is the process where a species changes over time?**

- a) Adaptation
- b) Evolution
- c) Mutation
- d) Speciation

**Correct Answer:** b) Evolution

**58. What is the term for the nonliving parts of an ecosystem?**

- a) Biotic factors
- b) Abiotic factors

- c) Producers
- d) Decomposers

**Correct Answer:** b) Abiotic factors

59. **What is the term for the ability of an organism to maintain stable internal conditions?**

- a) Adaptation
- b) Evolution
- c) Homeostasis
- d) Photosynthesis

**Correct Answer:** c) Homeostasis

60. **What is the term for a relationship where both species benefit?**

- a) Commensalism
- b) Parasitism
- c) Mutualism
- d) Competition

**Correct Answer:** c) Mutualism

## Earth and Space Science

61. **What is the term for the process by which rocks are formed from cooling lava?**

- a) Sedimentation
- b) Metamorphism
- c) Erosion
- d) Igneous formation

**Correct Answer:** d) Igneous formation

62. **What is the term for the process of water seeping into the ground?**

- a) Percolation
- b) Infiltration
- c) Runoff
- d) Condensation

**Correct Answer:** b) Infiltration

63. **What is the term for a region of space where gravity is so strong that not even light can escape?**

- a) Supernova
- b) Black hole
- c) Neutron star
- d) Galaxy cluster

**Correct Answer:** b) Black hole

64. **What is the term for the spinning motion of Earth on its axis?**

- a) Revolution
- b) Rotation
- c) Orbital motion
- d) Axis shift

**Correct Answer:** b) Rotation

65. **What do we call the point on Earth's surface directly above an earthquake's focus?**

- a) Fault line
- b) Epicenter
- c) Hypocenter
- d) Seismic zone

**Correct Answer:** b) Epicenter

66. **What is the name for a small, rocky body that orbits the Sun?**

- a) Asteroid
- b) Comet
- c) Meteorite
- d) Satellite

**Correct Answer:** a) Asteroid

67. **What is the term for the type of rock formed under heat and pressure?**

- a) Igneous rock
- b) Sedimentary rock
- c) Metamorphic rock
- d) Fossilized rock

**Correct Answer:** c) Metamorphic rock

68. **What is the term for the periodic rise and fall of ocean water levels?**

- a) Currents
- b) Waves
- c) Tides
- d) Swells

**Correct Answer:** c) Tides

---

## Physical Science

69. **What is the term for the amount of work done per unit of time?**

- a) Force
- b) Energy
- c) Power
- d) Momentum

**Correct Answer:** c) Power

70. **What is the term for the temperature at which a liquid turns into a gas?**

- a) Freezing point
- b) Boiling point
- c) Melting point
- d) Vaporization point

**Correct Answer:** b) Boiling point

71. **What is the term for the property of a material that does not allow heat or electricity to pass through it?**

- a) Conductor
- b) Insulator
- c) Resistor
- d) Reflector

**Correct Answer:** b) Insulator

72. **What is the term for the scattering of light in all directions?**

- a) Reflection
- b) Refraction
- c) Dispersion
- d) Diffusion

**Correct Answer:** d) Diffusion

73. **What is the term for the process by which a solid changes directly into a gas?**

- a) Condensation
- b) Vaporization
- c) Sublimation
- d) Melting

**Correct Answer:** c) Sublimation

74. **What is the term for the rate of change in velocity?**

- a) Speed
- b) Velocity
- c) Acceleration
- d) Momentum

**Correct Answer:** c) Acceleration

75. **What is the term for a machine that has no friction or energy loss?**

- a) Simple machine
- b) Complex machine
- c) Ideal machine
- d) Perfect machine

**Correct Answer:** c) Ideal machine

76. **What is the term for the buildup of electrical charges on the surface of an object?**

- a) Static electricity
- b) Current electricity
- c) Voltage
- d) Circuit

**Correct Answer:** a) Static electricity

---

## Life Science

77. **What is the process by which organisms break down sugar for energy?**

- a) Photosynthesis
- b) Fermentation
- c) Cellular respiration

d) Transpiration

**Correct Answer:** c) Cellular respiration

78. **What is the term for the waxy layer on plant leaves that reduces water loss?**

a) Stomata

b) Epidermis

c) Cuticle

d) Chlorophyll

**Correct Answer:** c) Cuticle

79. **What is the term for the organelle that produces energy for a cell?**

a) Nucleus

b) Ribosome

c) Mitochondria

d) Golgi body

**Correct Answer:** c) Mitochondria

80. **What is the term for the movement of molecules from high to low concentration?**

a) Osmosis

b) Diffusion

c) Active transport

d) Filtration

**Correct Answer:** b) Diffusion

81. **What is the term for the process by which plants absorb carbon dioxide and release oxygen?**

a) Respiration

b) Photosynthesis

c) Fermentation

d) Combustion

**Correct Answer:** b) Photosynthesis

82. **What is the term for an organism that relies on others for food?**

a) Producer

b) Consumer

c) Decomposer

d) Autotroph

**Correct Answer:** b) Consumer

83. **What is the term for a group of similar cells that perform the same function?**

a) Organ

b) Tissue

c) System

d) Molecule

**Correct Answer:** b) Tissue

84. **What is the term for a characteristic that increases an organism's chance of survival?**

a) Mutation

b) Adaptation

c) Variation

d) Trait

**Correct Answer:** b) Adaptation

**85. What does DNA stand for?**

- a. Dynamic Nucleus Acid
- b. Deoxyribonucleic Acid
- c. Deoxyribonucleic Assembly
- d. Double Nucleic Assembly

**Answer:** B. Deoxyribonucleic Acid

**86. Where is DNA found in most cells?**

- a. The mitochondria
- b. In the ribosomes
- c. In the nucleus
- d. In the cell membrane

**Answer:** C. In the nucleus

**87. What is the shape of a DNA molecule?**

- a. Single helix
- b. B. Double helix
- c. C. Spiral chain
- d. D. Circular loop

**Answer:** B. Double helix

---

## **Ecosystems and Environment**

**88. What is the term for organisms that break down dead material?**

- a) Producers
- b) Decomposers
- c) Consumers
- d) Scavengers

**Correct Answer:** b) Decomposers

**89. What is the term for all the organisms of different species living in a specific area?**

- a) Community
- b) Ecosystem
- c) Population

d) Habitat

**Correct Answer:** a) Community

90. **What is the term for a relationship where one organism benefits and the other is not affected?**

a) Mutualism

b) Commensalism

c) Parasitism

d) Competition

**Correct Answer:** b) Commensalism

91. **What is the term for the interaction between two organisms fighting for the same resource?**

a) Predation

b) Competition

c) Mutualism

d) Commensalism

**Correct Answer:** b) Competition

---

## Forces and Motion

92. **What is the term for the measure of an object's resistance to motion?**

a) Friction

b) Inertia

c) Velocity

d) Gravity

**Correct Answer:** b) Inertia

93. **What is the term for a force that opposes motion in fluids?**

a) Friction

b) Drag

c) Momentum

d) Tension

**Correct Answer:** b) Drag

---

## Energy and Matter

94. **What is the term for the transfer of heat through a liquid or gas?**

a) Conduction

b) Convection

c) Radiation

d) Insulation

**Correct Answer:** b) Convection



95. **What is the term for the ability of a substance to dissolve in another?**

- a) Conductivity
- b) Solubility
- c) Malleability
- d) Viscosity

**Correct Answer:** b) Solubility

96. **What is the term for the energy stored in an object because of its position?**

- a) Kinetic energy
- b) Potential energy
- c) Thermal energy
- d) Elastic energy

**Correct Answer:** b) Potential energy

97. **What is the term for the energy produced by vibrations?**

- a) Electrical energy
- b) Sound energy
- c) Chemical energy
- d) Nuclear energy

**Correct Answer:** b) Sound energy

98. **What is the term for the process of heat transfer through electromagnetic waves?**

- a) Convection
- b) Radiation
- c) Conduction
- d) Absorption

**Correct Answer:** b) Radiation

99. **What is the term for the resistance of a liquid to flow?**

- a) Viscosity
- b) Density
- c) Buoyancy
- d) Solubility

**Correct Answer:** a) Viscosity

100. **What is the term for the smallest unit of a compound?**

- a) Atom
- b) Molecule
- c) Ion
- d) Proton

**Correct Answer:** b) Molecule

101. **What is the term for the combination of two or more substances that do not chemically combine?**

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

**Correct Answer:** b) Mixture

102. **What is the term for the amount of energy needed to raise the temperature of 1 gram of water by 1°C?**

- a) Watt
- b) Joule
- c) Calorie
- d) Kelvin

**Correct Answer:** c) Calorie

103. **What is the term for the energy released during nuclear fission or fusion?**

- a) Chemical energy
- b) Nuclear energy
- c) Mechanical energy
- d) Thermal energy

**Correct Answer:** b) Nuclear energy