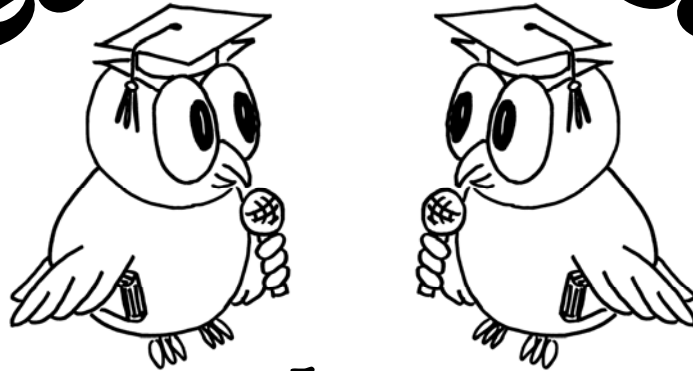


**Head to Head**



**Let's Go!**

**Science**

**Practice Test**

- 1 A single molecule of DNA bonded to various proteins and that carries the genes determining heredity is the definition of:
  - A. A chromosome
  - B. A nucleotide
  - C. Meiosis
  - D. Meiosis
  
- 2 Sir Isaac Newton described \_\_\_\_\_ laws of motion.
  - A. One
  - B. Two
  - C. Three
  - D. Four
  
- 3 This branch of science is devoted to the study of the earth.
  - A. Astronomy
  - B. Biology
  - C. Meteorology
  - D. Geology
  
- 4 What type of igneous rock is light enough to float?
  - A. Pumice
  - B. Basalt
  - C. Obsidian
  - D. Granite
  
- 5 The filament and the anther make up the \_\_\_\_\_ of a flower.
  - A. Stigma
  - B. Stamen
  - C. Pollen tube
  - D. Pistil
  
- 6 Which material is most conductive to an electrical current?
  - A. Metal
  - B. Glass
  - C. Wood
  - D. Air

- 7 The science of life or living organisms in all its forms and phenomena is:
- A. Botany
  - B. Biology
  - C. Anatomy
  - D. Biochemistry
- 8 Who was the first American astronaut to orbit the earth?
- A. Neil Armstrong
  - B. Buzz Aldrin
  - C. Virgil "Gus" Grissom
  - D. John Glenn
- 9 Which type of scientist would study the Crab Nebula?
- A. Astronomer
  - B. Oceanographer
  - C. Ichthyologist
  - D. Geologist
- 10 The Greek letter, lambda, commonly describes this wave property.
- A. Frequency
  - B. Amplitude
  - C. Wavelength
  - D. Refraction
- 11 The area of frequent earthquakes and volcanic eruptions known as the "Ring of Fire" surrounds this:
- A. Indonesia
  - B. The Atlantic Ocean
  - C. Southern California
  - D. The Pacific Ocean
- 12 Which term does NOT describe a pine tree?
- A. Conifer
  - B. Gymnosperm
  - C. Angiosperm
  - D. Woody plant

- 13 What is yeast?
- A. A plant
  - B. An animal
  - C. A bacteria
  - D. A fungus
- 14 What is the “jet stream”?
- A. The trail left by an airplane high in the sky
  - B. Tropical ocean currents
  - C. Condensation particles just beginning to form clouds
  - D. A fast air current
- 15 The basic unit of function in all living organisms is the:
- A. Microbe
  - B. Protozoa
  - C. Cell
  - D. Molecule
- 16 In 2006, which traditionally recognized planet was determined to no longer meet the definition of “planet”?
- A. Mercury
  - B. Pluto
  - C. Uranus
  - D. Neptune
- 17 “Alvin (DSV-2)” is a vehicle used to explore:
- A. Deep oceans
  - B. Deep space
  - C. The Grand Canyon
  - D. Rainforests
- 18 What was the title of Charles Darwin’s work published in 1859?
- A. The Theory of Evolution
  - B. The Origin of Species
  - C. From Sea to Land
  - D. From Ape to Man

- 19 The Kuiper Belt was first discovered in:
- A. 1892
  - B. 1947
  - C. 1992
  - D. 2007
- 20 This is the study of prehistoric life forms.
- A. Paleontology
  - B. Entomology
  - C. Archeology
  - D. Primatology
- 21 The Manhattan Project developed the first nuclear weapon during this war.
- A. The Civil War
  - B. World War I
  - C. World War II
  - D. The Korean War
- 22 "Velocity" is a synonym for:
- A. Force
  - B. Motion
  - C. Relativity
  - D. Speed
- 23 This concept that describes the way in which atoms interact to form molecules.
- A. Fission
  - B. Chemical bond
  - C. Equilibrium
  - D. Chemical reaction
- 24 Anatomy is the branch of biology that deals with the \_\_\_\_\_ of living things.
- A. Reproduction
  - B. Function
  - C. Death
  - D. Structure

- 25 The word “meteorology” is derived from the Greek word “meteoron” meaning”:
- A. Water from the sky
  - B. Motions of the winds
  - C. Storm from heaven
  - D. High in the sky
- 26 What gas is a byproduct of the process by which plants make food?
- A. Oxygen
  - B. Nitrogen
  - C. Carbon dioxide
  - D. Carbon monoxide
- 27 “The transfer of heat by the circulation or movement of the heated parts of a liquid or gas” is the definition of:
- A. Conduction
  - B. Diffusion
  - C. Convection
  - D. Osmosis
- 28 In human anatomy, the clavicle is also known as the:
- A. Collar bone
  - B. Knee cap
  - C. Shoulder blade
  - D. Tailbone
- 29 .Ornithology is a branch of:
- A. Botany
  - B. Zoology
  - C. Oceanography
  - D. Astronomy
- 30 This ancient Greek established a geocentric model of the universe in the 2nd century AD.
- A. Galileo
  - B. Ptolemy
  - C. Copernicus
  - D. Koepler

- 31 This total amount of \_\_\_\_\_ in a closed system may change form but always remains constant.
- A. Energy
  - B. Volume
  - C. Atoms
  - D. Magnetism
- 32 The largest and most diverse group of animals on earth is:
- A. Birds
  - B. Fish
  - C. Insects
  - D. Mammals
- 33 The basic unit of an element is the:
- A. Proton
  - B. Nucleus
  - C. Atom
  - D. Dendrite
- 34 The farthest point from Earth in a satellite's orbit is known as the:
- A. Apogee
  - B. Perigee
  - C. Axis
  - D. Nexus
- 35 An organelle is a subunit within a(n):
- A. Atom
  - B. Cell
  - C. Golgi Apparatus
  - D. Proton
- 36 This layer of the atmosphere contains almost all of the earth's water vapor.
- A. Troposphere
  - B. Exosphere
  - C. Stratosphere
  - D. Thermosphere

- 37 Which list corresponds to the parts of the earth known as the lithosphere, hydrosphere, biosphere and atmosphere? (in the same order)
- A. Water, air, life, rocks
  - B. Air, rocks, water, life
  - C. Rocks, life, air, water
  - D. Rocks, water, life, air
- 38 Which of the following is NOT a lever?
- A. A ramp
  - B. A balance scale
  - C. Ice tongs
  - D. A crowbar
- 39 The speed of sound at sea level is approximately:
- A. 1,500 miles per hour
  - B. 2,400 miles per hour
  - C. 760 miles per hour
  - D. 215 miles per hour
- 40 Which of the following is not another term for a tropical cyclone?
- A. Typhoon
  - B. Monsoon
  - C. Hurricane
  - D. Tropical depression
- 41 The Wright brothers created a craft capable of sustained flight in this year.
- A. 1879
  - B. 1921
  - C. 1852
  - D. 1903
- 42 The pituitary is part of this bodily system.
- A. Nervous
  - B. Immune
  - C. Endocrine
  - D. Integumentary



- 43 Which of the following is bigger than a gigabyte?
- A. Megabyte
  - B. Kilobyte
  - C. Bit
  - D. Terabyte
- 44 What is the human spleen?
- A. A nerve cell
  - B. A blood vessel
  - C. A bone
  - D. An organ
- 45 Which of the following is NOT one of the earth's natural resources?
- A. Rayon
  - B. Petroleum
  - C. Uranium
  - D. Asbestos
- 46 Fixed, movable and compound are types of this simple machine.
- A. Levers
  - B. Pulleys
  - C. Wheels and axles
  - D. Wedges
- 47 The North Star is commonly known by this name.
- A. Orion
  - B. Alpha Centauri
  - C. Cygnus
  - D. Polaris
- 48 "Brackish" is a term that describes water that is moderately:
- A. Polluted
  - B. Fluoridated
  - C. Salty
  - D. Populated

49 Sebaceous glands are found in the:

- A. Skin
- B. Bone marrow
- C. Brain
- D. Teeth

50 In covalent bonds, atoms share:

- A. Electrons
- B. Protons
- C. Neutrons
- D. Nuclei

**Congratulations!**

Thanks for sharpening your  
Science skills.

Good luck in competition!

# Science Answer Key

## Practice Test

|    | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |    | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |
|----|----------|----------|----------|----------|----|----------|----------|----------|----------|
| 1  | <b>X</b> |          |          |          | 26 | <b>X</b> |          |          |          |
| 2  |          |          | <b>X</b> |          | 27 |          |          | <b>X</b> |          |
| 3  |          |          |          | <b>X</b> | 28 | <b>X</b> |          |          |          |
| 4  | <b>X</b> |          |          |          | 29 |          | <b>X</b> |          |          |
| 5  |          | <b>X</b> |          |          | 30 |          | <b>X</b> |          |          |
| 6  | <b>X</b> |          |          |          | 31 | <b>X</b> |          |          |          |
| 7  |          | <b>X</b> |          |          | 32 |          |          | <b>X</b> |          |
| 8  |          |          |          | <b>X</b> | 33 |          |          | <b>X</b> |          |
| 9  | <b>X</b> |          |          |          | 34 |          | <b>X</b> |          |          |
| 10 |          |          | <b>X</b> |          | 35 |          | <b>X</b> |          |          |
| 11 |          |          |          | <b>X</b> | 36 | <b>X</b> |          |          |          |
| 12 |          |          | <b>X</b> |          | 37 |          |          |          | <b>X</b> |
| 13 |          |          |          | <b>X</b> | 38 | <b>X</b> |          |          |          |
| 14 |          |          |          | <b>X</b> | 39 |          |          | <b>X</b> |          |
| 15 |          |          | <b>X</b> |          | 40 |          | <b>X</b> |          |          |
| 16 |          | <b>X</b> |          |          | 41 |          |          |          | <b>X</b> |
| 17 | <b>X</b> |          |          |          | 42 |          |          | <b>X</b> |          |
| 18 |          | <b>X</b> |          |          | 43 |          |          |          | <b>X</b> |
| 19 |          |          | <b>X</b> |          | 44 |          |          |          | <b>X</b> |
| 20 | <b>X</b> |          |          |          | 45 | <b>X</b> |          |          |          |
| 21 |          |          | <b>X</b> |          | 46 |          | <b>X</b> |          |          |
| 22 |          |          |          | <b>X</b> | 47 |          |          |          | <b>X</b> |
| 23 |          | <b>X</b> |          |          | 48 |          |          | <b>X</b> |          |
| 24 |          |          |          | <b>X</b> | 49 | <b>X</b> |          |          |          |
| 25 |          |          |          | <b>X</b> | 50 | <b>X</b> |          |          |          |

# Head to Head Answer Sheet

Event \_\_\_\_\_ Name \_\_\_\_\_

School \_\_\_\_\_

|    | A                     | B                     | C                     | D                     |    | A                     | B                     | C                     | D                     |
|----|-----------------------|-----------------------|-----------------------|-----------------------|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 1  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 26 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 27 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 28 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 29 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 30 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 31 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 32 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 33 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 34 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 35 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 36 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 37 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 38 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 39 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 40 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 41 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 42 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 43 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 44 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 45 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 46 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 47 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 48 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 49 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 50 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Score (number correct): \_\_\_\_\_