



TMSCA ELEMENTARY SCIENCE STATE MEET TEST © 2021

GENERAL DIRECTIONS

1. About this test:
 - A. You will be given 40 minutes to take this test.
 - B. There are 50 problems on this test.
2. All answers must be written on the answer sheet/Scantron form/Chatsworth card provided. If you are using an answer sheet be sure to use **BLOCK CAPITAL LETTERS**. Clean erasures are necessary for accurate grading.
3. If using a Scantron answer form, be sure to correctly denote the number of problems not attempted.
4. You may write anywhere on the test itself. You must write only answers on the answer sheet.
5. You may use additional scratch paper provided by the contest director.
6. All problems have **ONE** and **ONLY ONE** correct [5BEST] answer. There is a penalty for all incorrect answers.
7. On the back of this page is a copy of the periodic table of the elements as well as a list of some potentially useful information in answering the questions.
8. A simple scientific calculator with the following formulas is sufficient for the science contest: +, -, %, ^, log x, e^x, ln x, y^x, sin x, sin^{-x}, cos x, cos^{-x}, tan x, tan^{-x}, with scientific notation and degree/radian capability.
The calculator must be silent, hand-held and battery operated. The calculator cannot be a computer or cannot have built-in or stored functionality that provides scientific information and cannot have communication capability. If the calculator has memory, it must be cleared. Each student may bring one spare calculator. **NO GRAPHING CALCULATORS ARE PERMITTED.**
9. All answers within $\pm 5\%$ will be considered correct.
10. All problems answered correctly are worth **FIVE** points. **TWO** points will be deducted for all problems answered incorrectly. No points will be added or subtracted for problems not answered.
11. In case of ties, percent accuracy will be used as a tie breaker.

[illegible]

Specific heat of water = $4.18 \text{ J/g} \cdot ^\circ\text{C}$

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1. Which of these is not located in the human body?
A. ulna B. cochlea C. xylem D. patella
2. The study of ants, bees and roaches is included in the field of _____.
A. entomology B. ornithology C. ichthyology D. herpetology
3. Which of these animals is not a marsupial?
A. opossum B. koala C. kangaroo D. platypus
4. Which of these biological classifications does not belong with the rest of the terms?
A. class B. family C. order D. genus
5. The tallest mountain in Oklahoma is:
A. Mt. Davis B. Black Mesa C. Mt. Rogers D. Guadalupe Peak
6. Which of these terms does not describe phases of the Earth's moon?
A. crescent B. gibbous C. stratus D. new
7. What is the name used for a female bear?
A. grizzly B. sow C. queen D. cow
8. Bile is produced by the liver. Which organ stores bile?
A. heart B. thyroid C. gall bladder D. pancreas
9. Which of these terms names a muscle found in the human torso?
A. biceps B. deltoid C. abdomen D. sternum
10. Which disease is known for uncontrolled growth and division of abnormal cells?
A. cancer B. polio C. small pox D. whooping cough
11. In the NASA space program, what was the first Apollo mission to enter space?
A. I B. III C. VII D. V
12. How many liters are in 12 centiliters of orange juice?
A. 1200 B. 0.12 C. 120 D. 0.012
13. Which of these North American mammals is the largest?
A. moose B. bison C. elk D. bear
14. Which animal is a reptile?
A. elephant B. mandrill C. alligator D. kangaroo
15. What is the term used for a mature male deer?
A. buck B. doe C. fawn D. boar

16. What device is used to measure the specific gravity of a liquid?

- A. barometer B. hydrometer C. hectometer D. thermometer

17. Which of these planets has the least moons?

- A. Mars B. Uranus C. Neptune D. Venus

18. Which of these animals is an equine?

- A. horse B. bear C. tiger D. elephant

19. Which of these layers of the Earth's atmosphere is between the thermosphere and the stratosphere?

- A. troposphere B. mesosphere C. exosphere D. lithosphere

20. Who was credited with the invention of dynamite?

- A. Davy B. Edison C. Nobel D. Tesla

21. A 3.0 earthquake is _____ times less powerful than a 7.0 earthquake.

- A. 10,000 B. 100 C. 100,000 D. 1,000

22. The _____ is a large ground squirrel found primarily in Eurasia and North America.

- A. mandrill B. mallard C. marmot D. mandarin

23. What is the largest of Jupiter's 79 moons?

- A. Europa B. Titan C. Triton D. Ganymede

24. What term describes a large displacement of rock formed along the boundaries of two tectonic plates?

- A. meiosis B. graph C. crustacean D. fault

25. _____ kilometers equals 214 hectometers.

- A. 21.4 B. 0.0214 C. 0.00214 D. 2140

26. What kind of rock forms from pressure acting on the accumulation of small particles at the bottom of bodies of water?

- A. igneous B. metamorphic C. sedimentary D. elementary

27. What term describes a flat, dark plain of lower elevation on the Moon?

- A. cliff B. mare C. crater D. stalagmite

28. What kind of rock is granite?

- A. igneous B. metamorphic C. diabetic D. sedimentary

29. What electrical term describes an unbroken path along which electrons from a voltage flow?

- A. insulation B. ground C. charge D. circuit

30. What is the common unit of measurement used by barometers?

- A. pound B. joule C. millibar D. kilogram

31. A substance used to create immunity against a disease is called a(an) _____.

- A. vaccine B. coagulant C. balm D. salve

32. The study of gnats, hornets and flies is included in the field of_____.

- A. epistemology B. entomology C. etymology D. endocrinology

33. A simple machine that redirects force with a grooved wheel and cable is called a/an _____.

- A. screw B. pulley C. wedge D. lever

34. Which of these animals does not belong to the same group?

- A. elk B. deer C. elephant D. moose

35. Who worked with Charles Babbage in the field of early computing devices?

- A. Hopper B. Curie C. Lovelace D. Edison

36. A group of alligators can be called a congregation. A group of apes can be called a/an _____.

- A. company B. culture C. shrewdness D. coalition

37. The IBM 650 Magnetic Drum Data-Processing Machine was primarily used in what decades?

- A. 1930's to 1940's B. 1950's to 1960's C. 1970's to 1980's D. 1980's to 1990's

38. The highest geologic point in Louisiana is:

- A. Wheeler Peak B. Driskill Mountain C. Mount Rogers D. Pike's Peak

39. What type of tree is a medium to large evergreen tree that produces large white flowers?

- A. sequoia B. elm C. oak D. magnolia

40. Which of these metals is usually the least valuable in the modern era?

- A. gold B. copper C. platinum D. silver

41. Which human organ secretes insulin?

- A. liver B. gall bladder C. stomach D. pancreas

42. Which of these is not a bone in the human body?

- A. radius B. ulna C. pistil D. patella

43. Which of these parts of the body would a neurologist most likely treat?

- A. lung B. heart C. kidney D. spinal cord

44. How many astronauts constituted a complete crew in the NASA Mercury series?

- A. 1 B. 2 C. 3 D. 4

45. Who acquired the first US patent for a sewing machine using a lockstitch design?

- A. Elias Howe B. Thomas Edison C. Nikola Tesla D. Robert Fulton

46. Which of these animals is a predator?

- A. elephant B. lion C. horse D. giraffe

47. Which of these animals is a vulpine?

- A. horse B. tiger C. fox D. ostrich

48. Which celestial object was reclassified as a dwarf planet in 2006?

- A. Pluto B. Venus C. Mars D. Sirius

49. What river forms the boundary between Mexico and the United States?

- A. Yukon B. Missouri C. Mississippi D. Rio Grande

50. What is the only movable bone in the human skull?

- A. cranium B. meniscus C. mandible D. femur

2020-2021 EL On-Line State Meet Science Answer Key

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