

1. Which of the following sea creatures is a mammal?

- A) Bottle-nosed dolphin
- B) Box jellyfish
- C) Dungeness crab
- D) Giant squid

2. The picture below shows which type of impending natural disaster?



- A) Tornado
- B) Hurricane
- C) Blizzard
- D) Volcanic eruption

3. Which of the following is NOT a layer of the earth's atmosphere and is a term usually used in geography instead?

- A) Stratosphere
- B) Troposphere
- C) Thermosphere
- D) Hemisphere

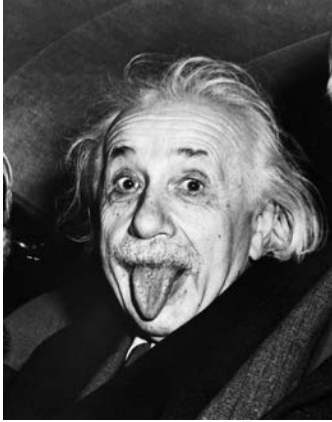
4. Which of the following is true about the bird seen here?



- A) It is called a peregrine falcon
- B) It is the fastest animal on Earth, reaching speeds of 200 mph when it dives
- C) It is found on every continent except Antarctica
- D) All of the above

5. Your question writer was born in 1981. Therefore, when I was your age...
- A) None of the moons of Jupiter had yet to be discovered
  - B) Pluto was still considered a planet
  - C) Humans had already set foot on Mars
  - D) Mammoths and Mastodons still roamed the earth as the last Ice Age hadn't yet ended

6. The man shown here is famous for discovering which of the following?



- A) Chaos theory
  - B) Cell theory
  - C) Theory of general relativity
  - D) Theory of evolution
7. Which of the following organisms does NOT migrate?
- A) Monarch butterfly
  - B) Ruby-throated hummingbird
  - C) Humpback whale
  - D) Poison oak

8. Which type of gemstone, the birthstone of the month of September, is shown here?



- A) Ruby
- B) Emerald
- C) Sapphire
- D) Garnet

9. Which of the following biomes contains the highest levels of biodiversity?

- A) Tundra
- B) Mediterranean scrubland
- C) Tropical rainforest
- D) Cold desert

10. Meet Sue! That's the name of the skeleton at the Field Museum in Chicago shown here. What type of dinosaur was she?



- A) *Stegosaurus*
- B) *Pterodactyl*
- C) *Tyrannosaurus rex*
- D) *Triceratops*

11. The branch of science that deals with the fundamental structure of matter, its behavior in space and time, as well as energy and force is known as what?

- A) Physics
- B) Organic chemistry
- C) Biology
- D) Meteorology

12. The photo shown here was taken where?



- A) South of the Antarctic Circle
- B) In a steppe environment
- C) In a subarctic climate zone
- D) Between the Tropic of Cancer and the Equator

13. Which of the following is found between Mars and Jupiter?

- A) The asteroid belt
- B) The comet collar
- C) The meteor hoodie
- D) The supernova scarf

14. Solve the Roman numeral math problem by selecting the correct Roman numeral:

IV + VI = ?

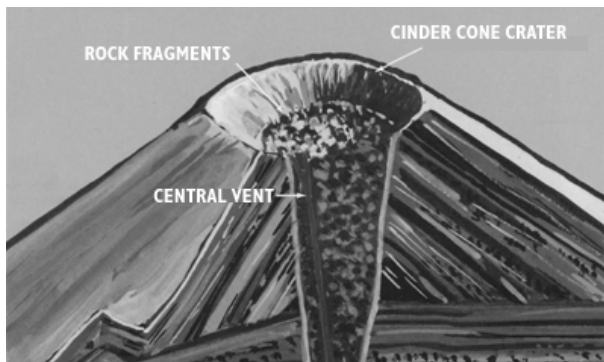
- A) X
- B) C
- C) D
- D) M

15. In biological classification, which term fills in the blank in the sequence here:

Kingdom, phylum, class, order, \_\_\_\_\_, genus, species

- A) Flock
- B) Family
- C) Conglomerate
- D) Clade

16. The diagram shown here provides a look at a cross-section of what?



- A) Monolith
- B) Volcano
- C) Glacier
- D) Trench

17. In which month is the Earth's axis tilted farthest from the sun for the continental USA?

- A) February
- B) December
- C) June
- D) September

18. What is the name given to the image shown here?

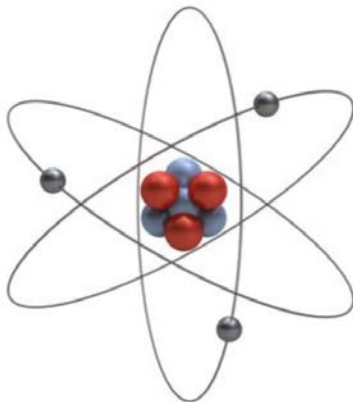
1 H Hydrogen																	2 He Helium														
3 Li Lithium	4 Be Beryllium											5 B Boron	6 C Carbon	7 N Nitrogen	8 O Oxygen	9 F Fluorine	10 Ne Neon														
11 Na Sodium	12 Mg Magnesium											13 Al Aluminium	14 Si Silicon	15 P Phosphorus	16 S Sulfur	17 Cl Chlorine	18 Ar Argon														
19 K Potassium	20 Ca Calcium	21 Sc Scandium	22 Ti Titanium	23 V Vanadium	24 Cr Chromium	25 Mn Manganese	26 Fe Iron	27 Co Cobalt	28 Ni Nickel	29 Cu Copper	30 Zn Zinc	31 Ga Gallium	32 Ge Germanium	33 As Arsenic	34 Se Selenium	35 Br Bromine	36 Kr Krypton														
37 Rb Rubidium	38 Sr Strontium	39 Y Yttrium	40 Zr Zirconium	41 Nb Niobium	42 Mo Molybdenum	43 Tc Technetium	44 Ru Ruthenium	45 Rh Rhodium	46 Pd Palladium	47 Ag Silver	48 Cd Cadmium	49 In Indium	50 Sn Tin	51 Sb Antimony	52 Te Tellurium	53 I Iodine	54 Xe Xenon														
55 Cs Caesium	56 Ba Barium	57 La Lanthanum	72 Hf Hafnium	73 Ta Tantalum	74 W Tungsten	75 Re Rhenium	76 Os Osmium	77 Ir Iridium	78 Pt Platinum	79 Au Gold	80 Hg Mercury	81 Tl Thallium	82 Pb Lead	83 Bi Bismuth	84 Po Polonium	85 At Astatine	86 Rn Radon														
87 Fr Francium	88 Ra Radium	89 Ac Actinium	104 Rf Rutherfordium	105 Db Dubnium	106 Sg Seaborgium	107 Bh Bohrium	108 Hs Hassium	109 Mt Meitnerium	110 Ds Darmstadtium	111 Rg Roentgenium	112 Cn Copernicium	113 Nh Nihonium	114 Fl Flerovium	115 Mc Moscovium	116 Lv Livermorium	117 Ts Tennessine	118 Og Oganesson														
																		58 Ce Cerium	59 Pr Praseodymium	60 Nd Neodymium	61 Pm Promethium	62 Sm Samarium	63 Eu Europium	64 Gd Gadolinium	65 Tb Terbium	66 Dy Dysprosium	67 Ho Holmium	68 Er Erbium	69 Tm Thulium	70 Yb Ytterbium	71 Lu Lutetium
																		90 Th Thorium	91 Pa Protactinium	92 U Uranium	93 Np Neptunium	94 Pu Plutonium	95 Am Americium	96 Cm Curium	97 Bk Berkelium	98 Cf Californium	99 Es Einsteinium	100 Fm Fermium	101 Md Mendelevium	102 No Nobelium	103 Lr Lawrencium

- A) Venn diagram
- B) Punnett square
- C) Periodic table of the elements
- D) Bohr's model of the atom

19. How many moons do the first three planets from the sun have combined?

- A) Zero
- B) One
- C) Four
- D) Seventeen

20. The diagram here shows a simplified version of what?

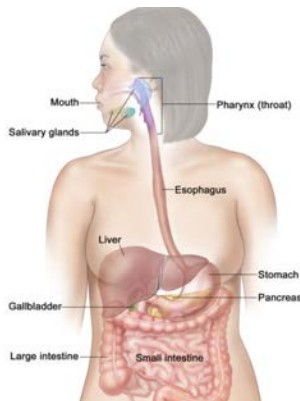


- A) The Solar System
- B) An atom
- C) Galaxy formation
- D) A glucose molecule

21. What daughter of the British poet Lord Byron is considered to be one of the first-ever computer programmers due to her work on algorithms?

- A) Ada Lovelace
- B) Marie Curie
- C) Valentina Tereshkova
- D) Sally Ride

22. The image here is a partial diagram of what system in the human body?



- A) Immune
- B) Digestive
- C) Respiratory
- D) Circulatory

23. What optical instrument is best used to view the parts of a plant cell?

- A) Telescope
- B) Prism
- C) Microscope
- D) Binoculars

24. "Oh the humanity!" was famously cried by a radio announcer during a disaster that was caused by what?



- A) The use of flammable hydrogen gas in the airship
- B) An accidental use of nuclear weapons
- C) Frozen precipitation
- D) A meteorite puncturing the shell of the airship

25. Which of the following shapes is defined as the set of all points in a two-dimensional plane that are equidistant from one point in the center?

- A) Square
- B) Sphere
- C) Circle
- D) Triangle

26. Which type of renewable energy is generated by the structure shown here?



- A) Hydroelectric
- B) Geothermal
- C) Wind
- D) Solar

27. Which of the following animals only lives in the wild in Asia?

- A) Tiger
- B) Lion
- C) Elephant
- D) Cheetah

28. The plant shown here, native to the Carolinas, is famous for its ability to do what?

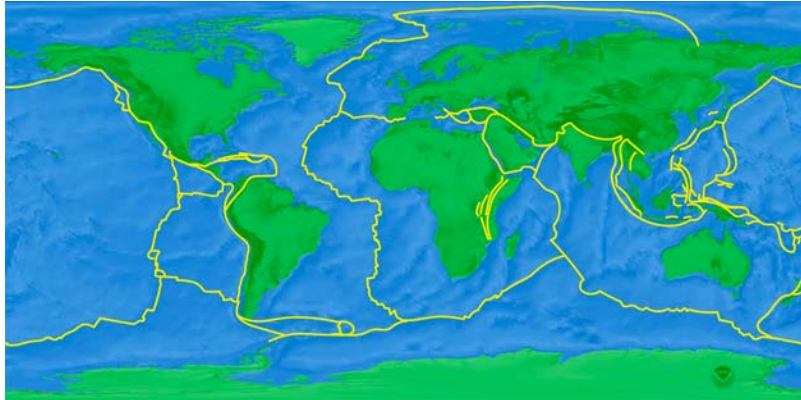


- A) Trap and eat insects
- B) Cause an itchy rash if touched by human skin
- C) Produce tasty citrus fruit
- D) Survive without water for over a year

29. Which term is used to refer to both the center of an atom and the control center of a cell?

- A) Generator
- B) Mitochondria
- C) Nucleus
- D) Proton

30. The yellow lines on the world map below outline the edges of what features?



- A) The limits of continental crust
- B) Earth's magnetic fields
- C) Earth's tectonic plates
- D) Climate zones

31. Which of the following is widely accepted to be the primary reason the dinosaurs went extinct?

- A) The onset of the most severe Ice Age in the earth's history
- B) A collision between the earth and the moon
- C) A variant of bubonic plague which overwhelmed their ability to fight off disease
- D) An asteroid colliding with the earth off the Yucatan Peninsula in Mexico

32. Which planet is shown here in a photograph from the Hubble Telescope?



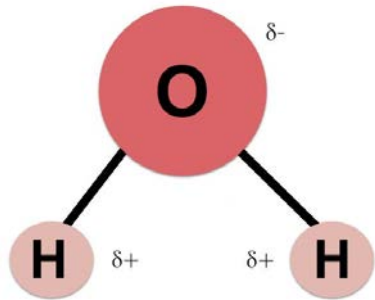
- A) Jupiter
- B) Saturn
- C) Mars
- D) Neptune



33. Which of the following is considered to be a greenhouse gas, which can cause global warming when released in large quantities?

- A) Carbon dioxide
- B) Nitrogen
- C) Oxygen
- D) Argon

34. Which molecule is depicted in the model here?



- A) Ozone
- B) Benzene
- C) Water
- D) Potassium sulfate

35. Which of the following is considered to be a producer in a rainforest food chain?

- A) Turkey vulture
- B) Harpy eagle
- C) Papaya tree
- D) Anaconda

36. What type of shape is shown below inscribed in a circle?



- A) Hexagon
- B) Pentagon
- C) Heptagon
- D) Octagon

37. If someone is described as lactose intolerant, which of the following foods would they have difficulty digesting?

- A) Bread
- B) Milk
- C) Fish
- D) Green vegetables

38. Which snake's range is shown in the map here?



- A) Desert sidewinder
- B) Timber rattlesnake
- C) King cobra
- D) Boa constrictor

39. Which of the following diseases was responsible for more human deaths than the other three diseases combined in 2021?

- A) Rabies
- B) Ebola
- C) Malaria
- D) Smallpox

40. The red and white-colored organism in the photo shown here belongs to which of the following kingdoms?



- A) Animalia
- B) Plantae
- C) Fungi
- D) Protozoa

41. At standard temperature and pressure, in what state of matter does platinum occur?

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

42. The animals shown here are described by what term, also used to describe opossums, wallabies, and koalas?

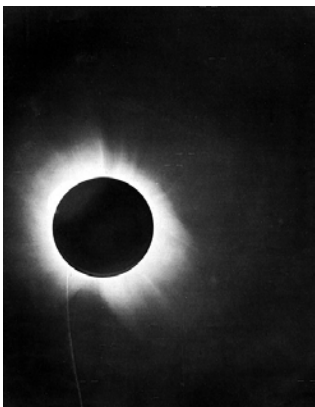


- A) Apex predator
- B) Marsupial
- C) Cold-blooded
- D) Amphibian

43. Which natural phenomenon was extensively studied by the English scientist Isaac Newton?

- A) Animal migration
- B) Gravity
- C) Extrasolar planets
- D) Quantum mechanics

44. What term is used to describe the event shown here (which one should never look at directly with naked eyes)?

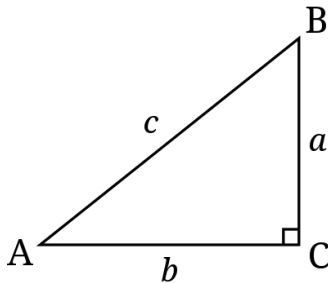


- A) Lunar eclipse
- B) Solar eclipse
- C) Aurora borealis
- D) Cumulonimbus

45. Which of the following materials can be described as a fossil fuel, meaning that it consists of formerly organic material that can be burned to release energy?

- A) Diamonds
- B) Coal
- C) Stainless steel
- D) Brass

46. Because it contains a 90 degree angle, what term is used to describe the triangle shown here?

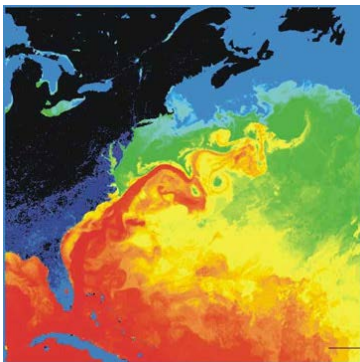


- A) Equilateral
- B) Right
- C) Obtuse
- D) Acute

47. If you read the side of a cereal box, you may see the terms “Riboflavin,” “Niacin,” and “Thiamin.” These are all types of what?

- A) B Vitamins
- B) Fiber
- C) Fats
- D) Proteins

48. The color red in this diagram represents what?



- A) The warmest air temperatures above the ocean
- B) The coldest air temperatures above the ocean
- C) The warmest water temperatures in the ocean
- D) The coldest water temperatures in the ocean

49. Which of the following trees is considered to be coniferous and is commercially grown for use as a Christmas tree?

- A) White oak
- B) Palmetto
- C) Douglas fir
- D) Ginkgo

50. The woman shown here will soon need the help of which type of professional?



- A) Obstetrician
- B) Gerontologist
- C) Optometrist
- D) Marine biologist