- 1. Which of the following sea creatures is a mammal?
  - A) Dugong
  - B) Portuguese man o' war
  - C) Abalone
  - D) Coelacanth
- 2. The picture below shows which type of impending natural disaster?

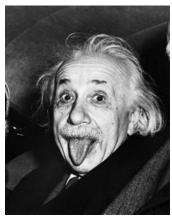


- A) Tornado
- B) Hurricane
- C) Blizzard
- D) Volcanic eruption
- 3. Which of the following is <u>NOT</u> a layer of the earth's atmosphere?
  - A) Stratosphere
  - B) Troposphere
  - C) Thermosphere
  - D) Lithosphere
- 4. Which of the following is true about the bird seen here?



- A) It is called a golden eagle
- B) It feeds exclusively on small mammals
- C) It is herbivorous
- D) It is the fastest animal on earth, reaching speeds of 200 mph when it dives

- 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) Red-eyed vireo
  - C) Humpback whale
  - D) American larch
- 8. Which type of gemstone, the birthstone of the month of September, is shown here?



- A) Turquoise
- B) Lapis lazuli
- C) Sapphire
- D) Garnet

- 9. Which of the following biomes contains the highest levels of biodiversity?
  - A) Temperate rainforest
  - B) Mediterranean scrubland
  - C) Tropical rainforest
  - D) Mangroves
- 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) Iguanodon
- C) Tyrannosaurus rex
- D) Brontosaurus
- 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) Atomology
- 12. The photo shown here was taken where?

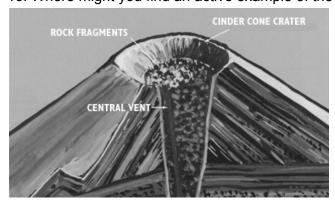


- A) South of the Antarctic Circle
- B) In a steppe environment
- C) In a subarctic climate zone
- D) Between the Tropic of Cancer and the Equator

- 13. Which of the following is the location of the asteroid belt?
  - A) Between Mars and Jupiter
  - B) Between Jupiter and Saturn
  - C) Beyond the orbit of Neptune
  - D) Between the Sun and the Earth
- 14. Solve the Roman numeral math problem by selecting the correct Roman numeral:

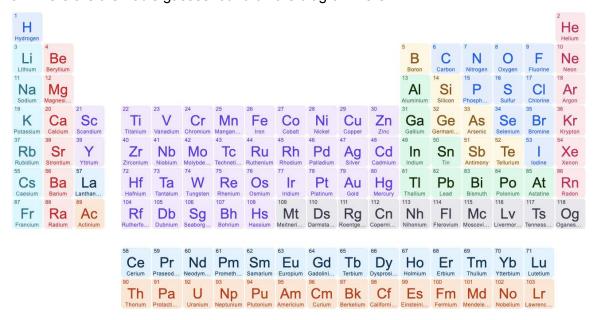
LIV + XLVI = ?

- 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. Where might you find an active example of the geological formation depicted here?

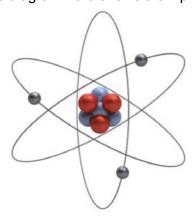


- A) Florida
- B) Central America
- C) Brazil
- D) Puerto Rico
- 17. In which month is the Earth's axis tilted farthest from the sun for the continental USA?
  - A) February
  - B) December
  - C) June
  - D) January

18. Where are the noble gasses found on the diagram here?

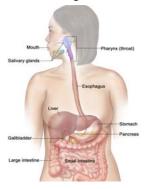


- A) In the far left column
- B) In the second column from the right
- C) In the far right column
- D) On the bottom row
- 19. How many moons do the first four planets from the sun have combined?
  - A) One
  - B) Two
  - C) Three
  - D) Seventeen
- 20. The diagram here shows a simplified version of 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) Katherine Johnson
- 22. The image here is a partial diagram of what system in the human body?

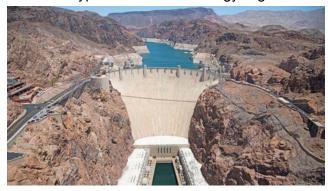


- A) Immune
- B) Digestive
- C) Respiratory
- D) Circulatory
- 23. To best observe which of the following would you need a microscope?
  - A) Ionosphere
  - B) Kuiper belt
  - C) Endoplasmic reticulum
  - D) Ursa Minor
- 24. "Oh the humanity!" was famously cried by a radio announcer during a disaster 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 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?

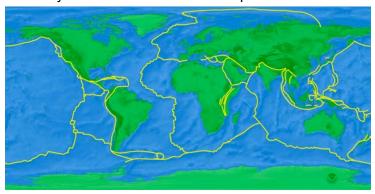


- A) Hydroelectric
- B) Geothermal
- C) Wind
- D) Solar
- 27. Which of the following animals only lives in the wild in Asia?
  - A) Tiger
  - B) Lion
  - C) Elephant
  - D) Cheetah
- 28. The plant shown here, native to the Carolinas, is famous for its ability to do what?



- 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?

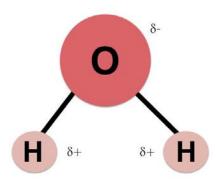


- A) The limits of continental crust
- B) Earth's magnetic fields
- C) Earth's tectonic plates
- D) Climate zones
- 31. Which of the following is widely accepted to be the primary reason the dinosaurs went extinct?
  - A) The onset of the most severe Ice Age in the earth's history
  - B) A meteor falling into Siberia
  - 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 Dutch scientist is famous for his studies of the planet shown here, including the discovery of its largest moon?



- A) Nicolas Copernicus
- B) Christiaan Huygens
- C) Percival Lowell
- D) Galileo Galilei

- 33. Which of the following is considered to be a greenhouse gas, which can cause global warming when released in large quantities?
  - A) Methane
  - 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) Keel-billed motmot
  - C) Kapok
  - 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 has difficulty digesting dairy products, then they might be described as?
  - A) Celiac
  - B) Lactose intolerant
  - C) AB Positive
  - D) Omnivorous
- 38. Which snake's range is shown in the map here?



- A) Desert sidewinder
- B) Timber rattlesnake
- C) Fer-de-lance
- D) Cottonmouth
- 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) Yellow fever
- 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 bromine 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. Isaac Newton was famous for discovering which of the following, together with his German contemporary Gottfried Leibniz?
  - A) Subatomic particles
  - B) Calculus
  - C) Hydrogen
  - D) Quantum mechanics
- 44. What term is used to describe the event shown here?

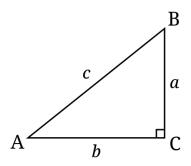


- A) Lunar eclipse
- B) Solar eclipse
- C) Aurora borealis
- D) Cumulonimbus

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) Lignite
- C) Stainless steel
- D) Brass

46. What term is used to describe the triangle shown here?

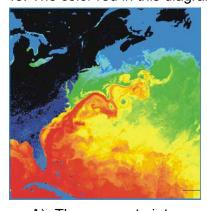


- A) Equilateral
- B) Right
- C) Obtuse
- D) Acute

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) Mahogany
- B) Palmetto
- C) Balsam
- D) Sugar maple
- 50. The woman shown here will soon need the help of which type of professional?



- A) Obstetrician
- B) Gerontologist
- C) Ophthalmologist
- D) Ichthyologist