

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

- A) Dall's porpoise
- B) Portuguese man o' war
- 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?

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

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

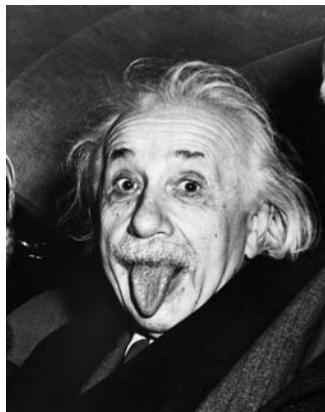


- A) It is called a golden eagle
- B) It feeds exclusively on small mammals
- C) It is herbivorous
- D) It is the fastest animal on earth, reaching speeds of 200 mph when it dives

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) Chestnut-sided warbler
- C) Humpback whale
- D) Quaking aspen

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



- A) Ruby
- 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) Mangrove

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 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:

$$LIV + XLVI = ?$$

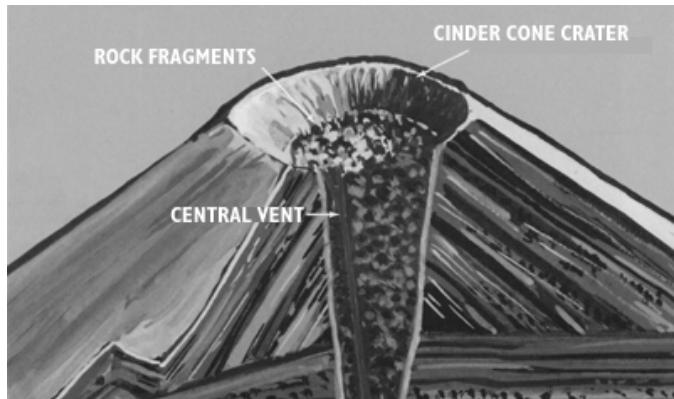
- A) X
- B) C
- C) D
- D) M

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. 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) January

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

1	H	Hydrogen	2	He	Helium																			
3	Li	Lithium	4	Be	Beryllium																			
11	Na	Sodium	12	Mg	Magnesi...																			
19	K	Potassium	20	Ca	Calcium																			
37	Rb	Rubidium	38	Sr	Strontrium																			
55	Cs	Caeesium	56	Ba	Barium																			
87	Fr	Francium	88	Ra	Radium																			
			89	Ac	Actinium																			
22	Ti	Titanium	23	V	Vanadium	24	Cr	Chromium	25	Mn	Mangan...													
40	Zr	Zirconium	41	Nb	Niobium	42	Mo	Molybde...	43	Tc	Techneti...													
72	Hf	Hafnium	73	Ta	Tantalum	74	W	Tungsten	75	Re	Rhenium													
104	Rf	Rutherford...	105	Db	Dubnium	106	Sg	Seaborg...	107	Bh	Borhium													
58	Ce	Cerium	59	Pr	Praseod...	60	Nd	Neodym...	61	Pm	Prometh...													
90	Th	Thorium	91	Pa	Protacti...	92	U	Uranium	93	Np	Neptunium													
62	Sm	Samarium	63	Eu	Europium	64	Gd	Gadolini...	65	Tb	Terbium	66	Dy	Dysprosi...										
94	Pu	Plutonium	95	Am	Americium	96	Cm	Curium	97	Bk	Berkelium	98	Ho	Holmium	99	Er	Erbium							
													100	Fm	Fermium	101	Tm	Thulium	102	Yb	Ytterbium	103	Lu	Lutetium
														Es	Einsteini...		Md	Mendele...		No	Nobelium		Lr	Lawrenc...

A) Venn diagram

B) Punnett square

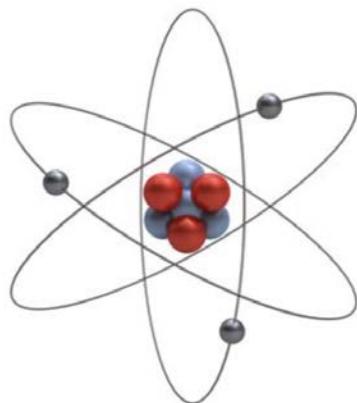
C) Periodic table of the elements

D) Bohr's model of the atom

19. How many moons do the first 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?

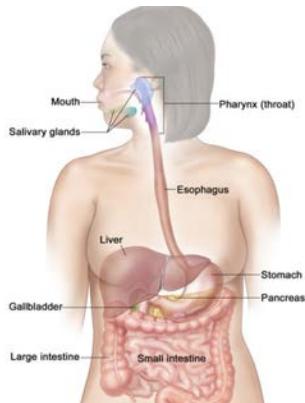


- A) The Solar System
- B) An atom
- C) Galaxy formation
- D) A glucose molecule

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) 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 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?

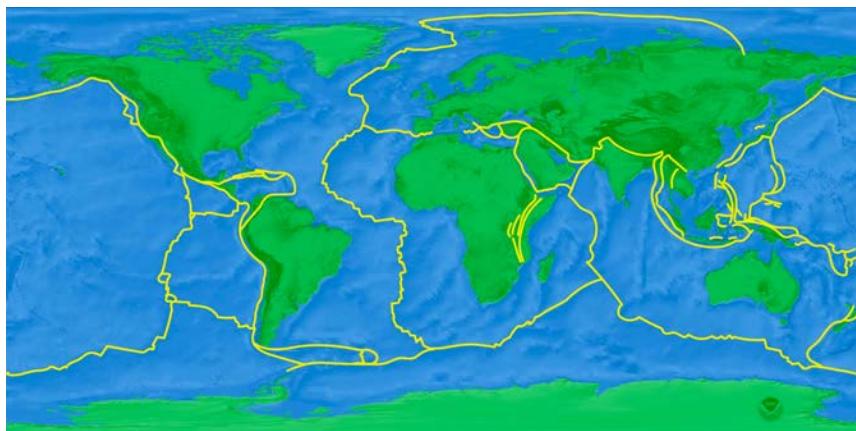


- A) Trap and eat insects
- B) Cause an itchy rash if touched by human skin
- C) Produce tasty citrus fruit
- D) Survive without water for over a year

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, Titan?

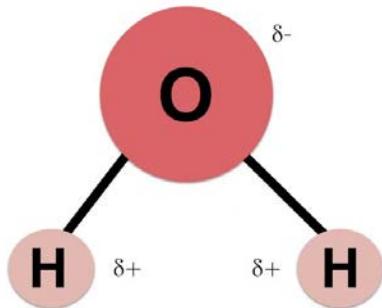


- A) Nicolas Copernicus
- B) Christiaan Huygens
- C) Percival Lowell
- D) Galileo Galilei

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

- A) 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?

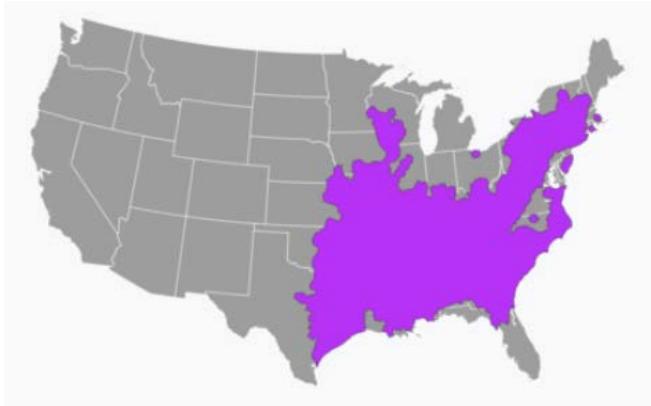


- A) Hexagon
- B) Pentagon
- C) Heptagon
- D) Octagon

37. If someone 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) King cobra
- 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) 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 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?

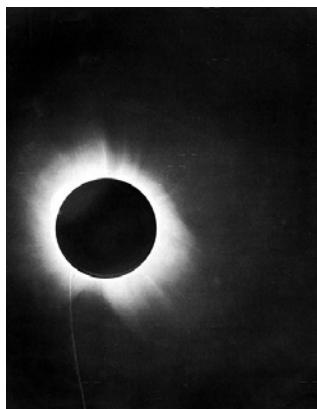


- A) Apex predator
- B) Marsupial
- C) Cold-blooded
- D) Amphibian

43. 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?

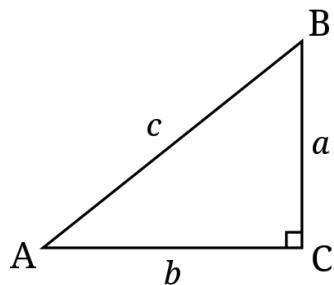


- A) Lunar eclipse
- B) Solar eclipse
- C) Aurora borealis
- D) Cumulonimbus

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?

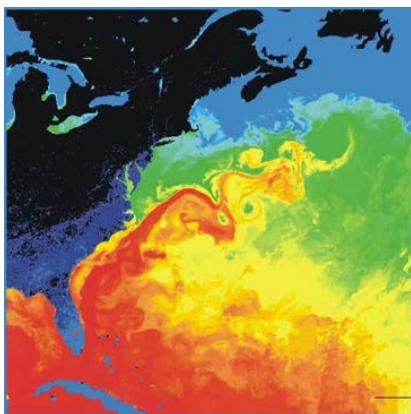


- A) Equilateral
- B) Right
- C) Obtuse
- D) Acute

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