

28 Multiple choice questions

1. an electron given off by a radioactive nucleus
 - a. qualitative
 - b. beta particle
 - c. half-life
 - d. alpha particle

2. an ancient continent believed to have existed during the Palaeozoic and Mesozoic times that eventually split up to form Australia, India, Antarctica, Africa and South America
 - a. gondwana
 - b. pangaea
 - c. fohn wind
 - d. laurasia

3. a mountain range or deep valley running under the world's oceans
 - a. radiometric dating
 - b. radioisotope
 - c. mid-oceanic ridge
 - d. relative age

4. an atomic particle found in the nucleus of atoms that has almost the same mass a proton but no electrical charge
 - a. subduction
 - b. proton
 - c. neutron
 - d. electron

5. the negatively charged particle that orbits the atomic nucleus. The chemical properties of elements depend on the number and arrangement of these electrons
 - a. neutron
 - b. subduction
 - c. proton
 - d. electron

6. if rock layers are crossed by another layer at an angle, the cross-cutting layer will be the youngest
 - a. law of superposition
 - b. law of cross-cutting relationships
 - c. radiometric dating
 - d. gamma radiation

7. the determination of ages of rocks, minerals and once living material by measuring the levels of certain radioactive elements
 - a. gamma radiation
 - b. mid-oceanic ridge
 - c. radioisotope
 - d. radiometric dating

8. the time it takes for half a sample of radioactive atoms to decay
 - a. qualitative
 - b. fohn wind
 - c. laurasia
 - d. half-life

9. during radioactive decay, the isotope that emits a particle to form a different daughter isotope
 - a. daughter isotope
 - b. proton
 - c. radioisotope
 - d. parent isotope

10. the crescent-shaped supercontinent made up of all the present continents fitted together to form one large landmass; plate tectonics is believed to have split pangaea into laurasia and gondwana and later into the present-day continents
 - a. laurasia
 - b. proton
 - c. gondwana
 - d. pangaea

11. that part of the electromagnetic spectrum with the shortest wavelength
 - a. gamma radiation
 - b. alpha particle
 - c. subduction
 - d. laurasia

12. the ancient landmass that comprised the present day continents of North America, Europe and Asia
 - a. trench
 - b. laurasia
 - c. pangaea
 - d. half-life

13. a positively charged particle found in the nuclei of all atoms; it has a single positive charge that just balances the negative charge of an electron and has a mass almost the same as a neutron
- neutron
 - proton
 - electron
 - trench
14. a transform boundary between crustal plates where no new crusts forms and no old crust is destroyed; also known as a passive boundary
- conservative boundary
 - continental drift
 - asthenosphere
 - relative age
15. a helium nucleus given off by a radioactive nucleus
- beta particle
 - half-life
 - qualitative
 - alpha particle
16. an isotope of an element that emits radioactive particles
- parent isotope
 - radioisotope
 - proton
 - daughter isotope
17. the use of the terms era, period or epoch of the geological times scale; for example, to say a fossil is Devonian says it is older than fossils found in the Carboniferous but younger than a fossil from the Silurian
- laurasia
 - pangaea
 - qualitative
 - relative age
18. a very rapid increase in numbers
- electron
 - continental drift
 - neutron
 - exponential growth

19. the element formed during radioactive decay of the parent isotope
 - a. asthenosphere
 - b. daughter isotope
 - c. parent isotope
 - d. radioisotope

20. the theory that the surface of the earth is divided into a number of constantly moving crustal plates; this crustal plate movement can be used to explain the present positions of the continents and hence the present distribution of living things
 - a. proton
 - b. plate tectonics
 - c. electron
 - d. parent isotope

21. that part of the upper mantle beneath the rigid lithosphere that is plastic enough for rock flowage to occur
 - a. parent isotope
 - b. asthenosphere
 - c. trench
 - d. daughter isotope

22. the formation and break up of continents caused by the movement of landmasses on the surface of the Earth
 - a. half-life
 - b. foehn wind
 - c. continental drift
 - d. exponential growth

23. descriptive rather than numerical
 - a. half-life
 - b. laurasia
 - c. qualitative
 - d. subduction

24. a type of silica-rich explosive eruption named after the Andes Mountains
 - a. andesitic volcanism
 - b. plate tectonics
 - c. neutron
 - d. relative age

25. a long, narrow and usually steep-sided depression, such as in the ocean floor where one plate of the earth's crust is sliding over another
- electron
 - neutron
 - trench
 - proton
26. the process by which one crustal plate descends beneath another, such as along a deep ocean trench
- electron
 - neutron
 - proton
 - subduction
27. in a sequence of sedimentary rocks or lava flows, each layer is younger than the one beneath it and older than the one above it
- law of superposition
 - subduction
 - proton
 - gamma radiation
28. a warm, dry wind on the opposite side of a mountain range from which the wind comes; as the air moves over the mountain range and down the other side, the air sinks and warms, causing clouds to vanish; this results in dry air that not only decreases rainfall but also increases evaporation on the other side of the mountains
- fohn wind
 - gondwana
 - laurasia
 - trench