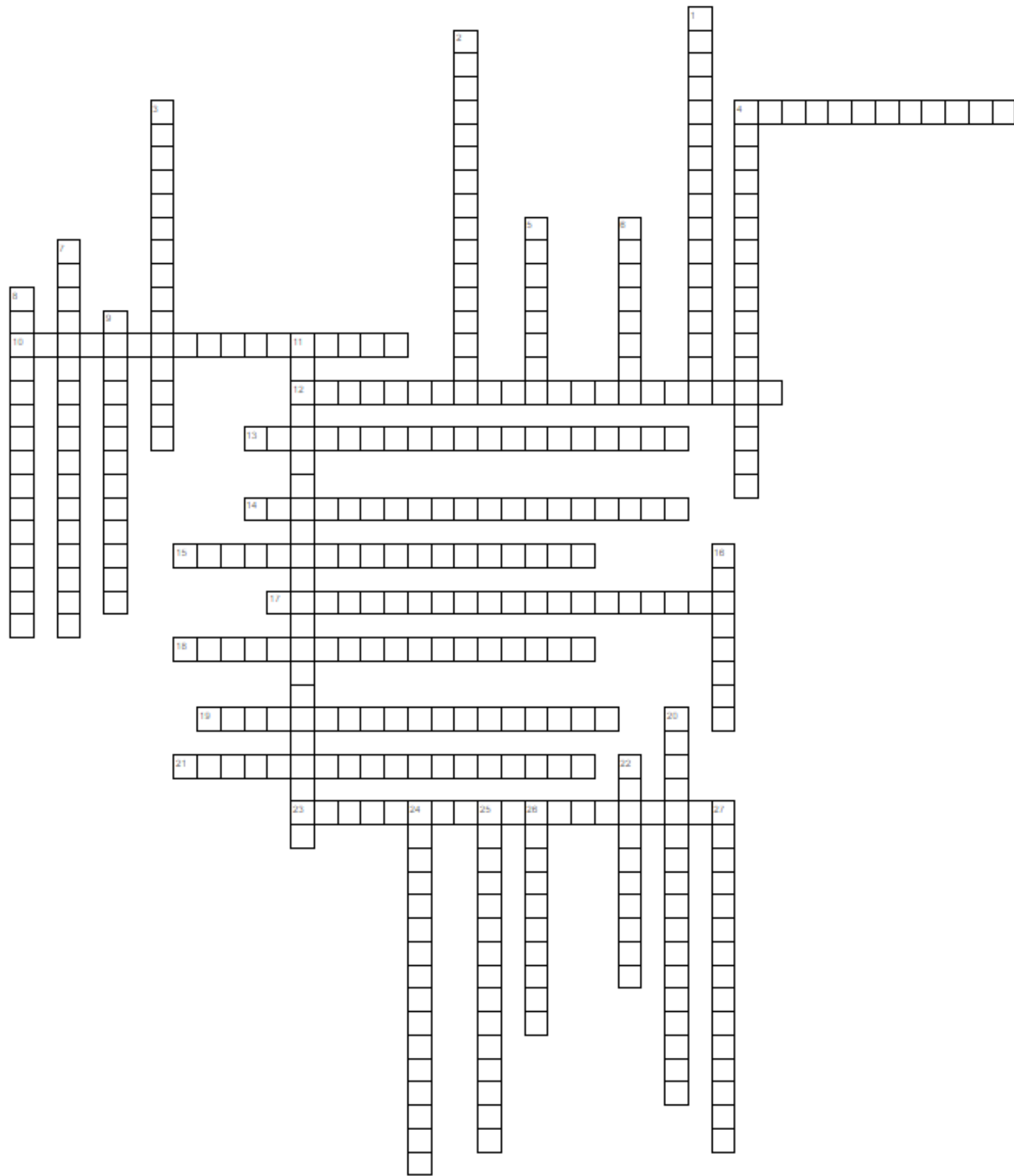


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| <p>Across</p> <p>2 fossils that are known to be common during a particular time, and so indicate the age of the rock they are found in</p> <p>3 a new species gradually develops as a result of mutation and adaptation to changing environmental conditions, and the old species is gradually replaced.</p> | <p>Down</p> <p>1 anatomical features that no longer retain their function</p> <p>4 produced some of the earliest known evidence of the evolution of multicellular animals (the metazoans).</p> <p>9 the father of paleontology</p> |
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| <p>5 the study of the past and present geographical distribution of species</p> <p>6 large-scale evolutionary changes including the formation of new species or other taxa</p> <p>7 remains or traces of past life preserved in sedimentary rock, which reveal the history of life on Earth</p> <p>8 this species had characteristics of both reptiles (dinosaurs) and birds.</p> <p>10 the theory that changes in the earth's crust during geological history have resulted chiefly from sudden violent and unusual events.</p> <p>12 the relative change in genetic traits of populations that occurs over successive generations</p> <p>14 is the condition of a species that ceases to exist in a chosen geographic area of study, though it still exists elsewhere.</p> <p>15 are changes in behavior that certain organisms or species use to survive in a new environment.</p> <p>16 are physical features on an animal that have evolved over time to help them survive and breed.</p> <p>18 physical features with the same evolutionary origin and underlying structural elements, but that may have different functions</p> <p>19 tendency among species that are not closely related to develop similar body plans when living under the same conditions</p> <p>21 a form of natural selection that favours the extremes of a range of phenotypes over intermediate phenotypes, and may eliminate intermediate phenotypes from the population</p> <p>22 physical features that evolved separately but perform similar functions in different types of organisms</p> <p>23 a form of natural selection that favours the phenotype at one extreme over the other</p> <p>25 the comparative study of the body structures of different species of animals in order to understand the adaptive changes they have undergone in the course of evolution from common ancestors.</p> <p>27 selective breeding to obtain varieties of plants or animals with desired traits</p> <p>29 fossils that show intermediary links between groups of organisms</p> <p>30 is a source of variation. Through sexual reproduction, parents pass down hereditary information (genes) to their offspring.</p> <p>36 a form of natural selection that favours an intermediate phenotype and acts against extreme versions of the phenotype.</p> <p>42 Came up with Natural Selection at the same time as Dawrin</p> <p>43 Came up with the idea of Natural Selction, wrote On the Origin of Species</p> <p>44 unearthed the ancient remains of a prehistoric fish called Ichthyosaurus, the specimen looked unlike any animal known to be living during Anning's time.</p> <p>45 The embryos of different groups of organisms exhibit similar stages of embryonic development.</p> | <p>11 The father of Geology, Said that geological processes operated at the same rates in the past as they do today.</p> <p>13 refers to the metabolic or physiologic adjustment within the cell, or tissues, of an organism in response to an environmental stimulus resulting in the improved ability of that organism to cope with its changing environment.</p> <p>17 the formation of new species</p> <p>20 one or more species arise from a parent species that continues to exist. (Adaptative Radiation)</p> <p>24 proposed that populations produced far more offspring than their environments (for example, their food supply) could support and were eventually reduced by starvation or disease.</p> <p>26 Said Earth was much older than 6000 years, wrote Histoire Naturelle</p> <p>28 a visible or invisible difference among some members of a population</p> <p>31 is the termination of a kind of organism or of a group of kinds, usually a species.</p> <p>32 a structure, behaviour, or physiological process that helps an organism survive and reproduce in a particular environment</p> <p>33 method of dating rocks and minerals that uses measurements of certain radioactive isotopes to calculate absolute age in years</p> <p>34 gradual change in allele frequencies in a population over time</p> <p>35 developed as technologies to identify molecules such as DNA and proteins developed.</p> <p>37 is an evolutionary effect prominent in several arthropods, where dark pigmentation (melanism) has evolved in an environment affected by industrial pollution, including sulphur dioxide gas and dark soot deposits.</p> <p>38 is the process through which populations of living organisms adapt and change. Individuals in a population are naturally variable, meaning that they are all different in some ways.</p> <p>39 a special case of natural selection in which a particular phenotype improves an individual's chances of obtaining a mate</p> <p>40 He thought that species increased in complexity over time, until they achieved a level of perfection. Also thought inheritance of acquired characteristics was true</p> <p>41 it is the time when most of the major groups of animals first appear in the fossil record.</p> |
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- 10 features of different populations that keep them reproductively isolated, even when they exist in the same geographic area
- 12 model that describes evolution as consisting of long periods of stasis, interrupted by periods of rapid change
- 13 feature such as mountain that physically separates populations and so prevents them from interbreeding
- 14 isolation biological barrier in which closely related species have incompatible reproductive structures, and so either cannot mate, or, in the case of plants, cannot be pollinated by the same species of pollinator
- 15 condition of a gene pool in which allele frequencies remain constant over time, and therefore the population is not evolving - Hardy Weinberg
- 17 biological barrier in which species-specific signals or behaviours prevent interbreeding with closely related species
- 18 a mechanism that blocks reproduction after fertilization and zygote formation.
- 19 proportion of a population with a particular phenotype, expressed as a decimal or percent
- 21 the study of genetic variation in populations
- 23 biological barrier in which different species live in the same general area, but use different habitats, and so rarely encounter each other aka Habitat Isolation
- 2 gene pool change that results from a rapid decrease in population size
- 3 a biological barrier that exists between two species because, although they can mate and produce hybrid offspring, the offspring are sterile
- 4 proportion of a population with a particular genotype, usually expressed as a decimal
- 5 to evolve together, as occurs with closely associated species so that the evolution of one depends on the evolution of the other
- 6 sum of all alleles for all the genes in a population
- 7 timing barriers that prevent species in the same habitat from interbreeding; species may mate or flower at different times of the day, in different seasons, or in different years
- 8 a biological barrier that occurs when first generation hybrids mate with each other or with an individual from either parent species, and the offspring are either sterile or weak.
- 9 gene pool change that occurs when a few individuals start a new, isolated population
- 11 the inability of a species to breed successfully with related species due to geographical, behavioral, physiological, or genetic barriers or differences.
- 16 net movement of alleles from one population to another due to the migration of individuals
- 20 a genetic incompatibility of interbred species that stops development of the hybrid zygote during its development
- 22 model that describes evolution as slow, steady, and linear, with the accumulation of many small changes producing large changes
- 24 biological barrier, such as a chemical marker on an egg, that prevents eggs and sperm from different species fusing to form a zygote
- 25 rate of occurrence of a particular allele in a population with respect to a particular gene
- 26 occurs when closely related individuals breed together. – also non-random mating
- 27 mating among individuals that prevents those with particular phenotypes from breeding, as in mate selection or inbreeding

Across

- 4 change in allele frequencies (gene pool) in a small breeding population due to chance events

Down

- 1 a mechanism that blocks reproduction from taking place by preventing fertilization.