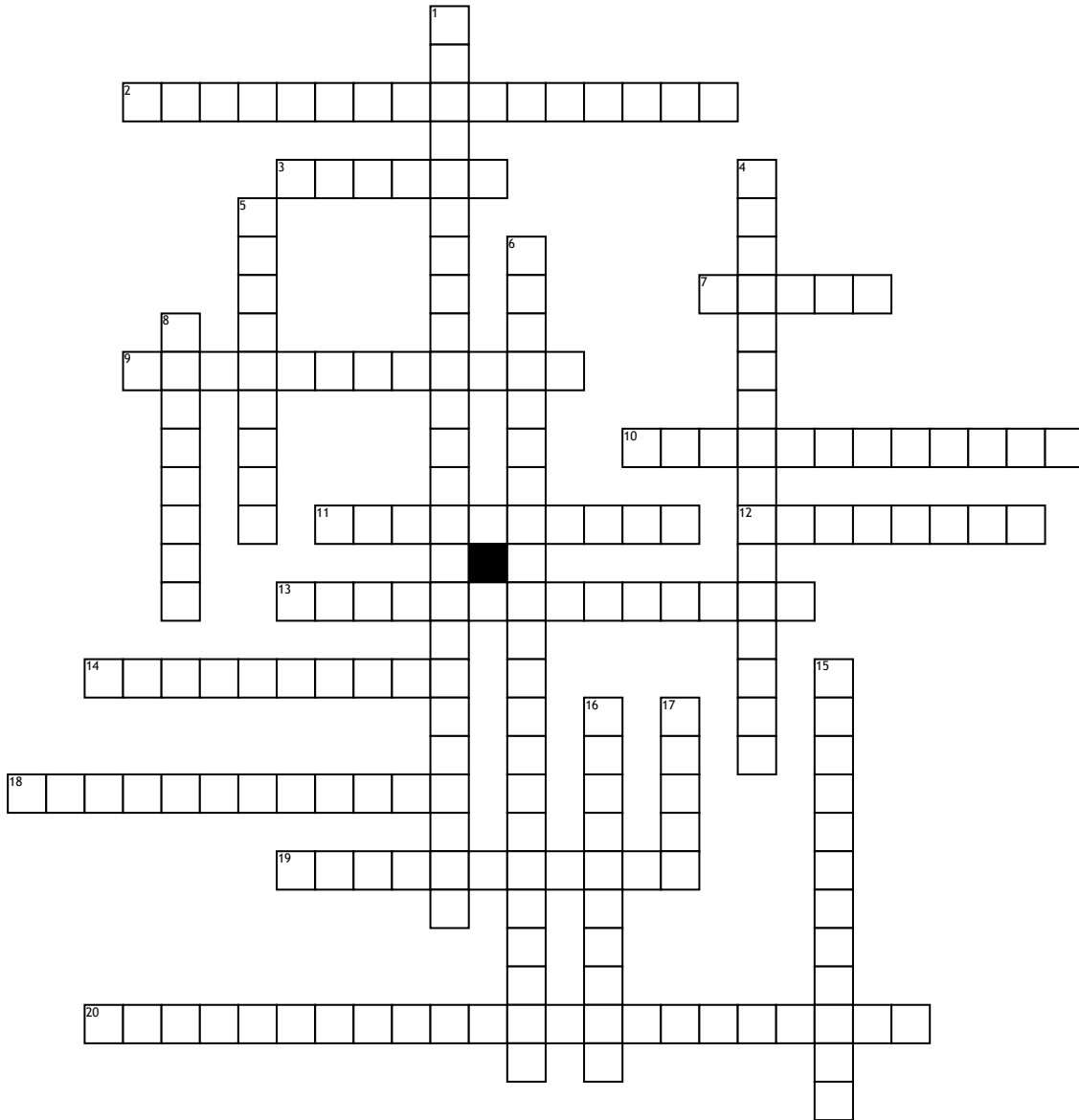


Chapter 20 Phylogeny



Across

- 2. Principle that states that when considering multiple explanations for an observation, one should first investigate the simplest explanation that is consistent with the facts
- 3. Means that a branch point within the tree represents the most recent common ancestor of all taxa
- 7. Group of species that includes ancestral species and all of its descendants
- 9. Equivalent to a clade
- 10. Representation on a phylogenetic tree of the divergence of two or more taxa from a common ancestor
- 11. Lineage that diverges early in the history of a group and lies near the common ancestor
- 12. Scientific discipline concerned with naming and classifying the diverse forms of life

- 13. An approach for measuring the absolute time of evolutionary change based on the observation that some genes and other regions of genomes appear to evolve at constant rates
 - 14. Groups of organisms that share an immediate common ancestor
 - 18. Group of taxa that consists of a common ancestor and some of its descendants
 - 19. Discipline focused on classifying organisms and determining their evolutionary relationships
 - 20. Evolutionary novelty that is unique to a particular clade
- Down**
- 1. Character shared by members of a particular clade but originated in an ancestor that is not a part of the clade

- 4. Branching diagram that represents a hypothesis about the evolutionary history of a group of organisms
- 5. Evolutionary history of a species or group of species
- 6. Process in which genes are transferred from one genome to another through mechanisms such as exchange of transposable elements and plasmids, viral infections, and fusions of organisms
- 8. Branch point from which more than two descendant groups emerge
- 15. Group of taxa derived from two or more different ancestors
- 16. Approach to systematics in which organisms are placed into groups based on common descent
- 17. Designated by the first word of a species' two-part scientific name