

## Evaluate: Phylogenetic Trees – Multiple Choice Questions

Choose the correct answer for each question below by circling or marking the correct option.

**1. What is the purpose of a phylogenetic tree?**

- a) To show genetic mutations in DNA sequences.
- b) To display the physical appearance of organisms.
- c) To represent evolutionary relationships among organisms.
- d) To classify organisms by their habitat.

**2. In a phylogenetic tree, what do the branch points (nodes) represent?**

- a) Mutations in DNA.
- b) Common ancestors.
- c) Traits shared by all organisms.
- d) The oldest organism in the tree.

**3. Which of the following traits is shared by all vertebrates?**

- a) Hair
- b) Amniotic egg
- c) Four limbs
- d) Vertebra

**4. Which group of organisms is more closely related?**

- a) Salmon and Eagle
- b) Crocodile and Frog
- c) Eagle and Wolf
- d) Wolf and Salmon

**5. What is the difference between a cladogram and a phylogenetic tree?**

- a) A cladogram uses DNA; a phylogenetic tree does not.
- b) A phylogenetic tree shows evolutionary time; a cladogram does not.
- c) A cladogram is circular; a phylogenetic tree is not.
- d) There is no difference between them.