Station 1: Vocabulary \_\_\_\_\_\_\_\_\_\_\_ /16 points

|  |  |
| --- | --- |
| 1. Nuchal | 9. Crepuscular |
| 1. Cloaca | 10. Saxicolous |
| 1. Bifurcated | 11. Glottis |
| 1. Poikilotherm | 12. Ataxia |
| 1. Gravid | 13. Spur |
| 1. Heliothermy | 14. Xanthic |
| 1. Mandible | 15. Thigmothermic |
| 1. Follicular vitellogenesis | 16. Brumation |

Station 2: Facts \_\_\_\_\_\_\_\_\_\_\_\_/ 14 points

|  |  |
| --- | --- |
| 1. False | 6. 1 pt endotherms 1 – 3 %  1 pt ectotherms 21 – 90 % |
| 1. True | 7. B C D |
| 1. Heat loss | 1. 1 pt 500 snakes are venomous 2. pt 30 – 40 are harmful |
| 1. 1 pt for surface to volume ratio   1 pt for metabolic heat must be generated constantly | 9. 1 pt snakes and lizards flick their tongues to capture scent particles   1. pt including Jacobson’s organ |
| 5. Constant body temperature allows enzymes to specialize on a narrow temperature range | 10. Keratin  11. hibernation/brumation |

Station 3: Reproduction \_\_\_\_\_\_\_\_\_\_\_/ 19 points

|  |  |
| --- | --- |
| 1. Vocalization | 1. Snake |
| 1. Time | 1. Turtles |
| 1. A | 1. (1 pt) aquatic   (1 pt) direct developing or viviparous  1 pt) direct developing or viviparous |
| 1. Both | 1. (1 pt) scrape female skin   (1 pt) pheromones |
| 1. Snake | 1. In water or aquatically |
| 1. Snake | 1. Proteidae |
| 1. Turtles | 1. Rhyacotridonidae |
| 1. Turtles | 1. Ambystromatidae |

**Station 4: Amphibians I \_\_\_\_\_\_/24 points**

|  |  |
| --- | --- |
| 1. Maxilla | 13. Hearing/ detection sound vibrations |
| 2. Phalanges | 14. both |
| 3. Metacarpal | 15. female |
| 4. Radio-Ulna | 16. otic vesicle/tympanic membrane |
| 5. Ilium | 17. eye |
| 6. Femur | 18. gill |
| 7. Tarsals | 19. lateral line |
| 8. Ranidae | 20. B, D, G, H, I |
| 9. Hylidae Pseudacris | 21. Scaphiopodidae, Scaphiopus or Spea |
| 10. small insects/spiders | 22. dry grasslands with sandy soils |
| 11. Atlantic to Pacific Coast | 23. 1 – 2 days |
| 12. Tympanic Membrane | 24. aestivation |

**Station 5: Amphibians II \_\_\_\_\_\_ /26 points**

|  |  |
| --- | --- |
| 1. Southern Appalachian | 13. toxic skin secretions |
| 2. Hemidactylium | 14. B, E, F |
| 3. hind | 15. Cryptobranchidae |
| 1. white belly (1 pt)   Brighter colored tail (1pt) | 16. (1/2 pt each) Temperature, pollutants, oxygen, acidity of water |
| 5. Plethodontidae | 17. water breather, absorbs oxygen through skin, increased surface area supports needs |
| 6. lungless/ obtains oxygen through skin | 18. higher oxygen content |
| 7. wetland habitat loss | 19. Sirenidae |
| 8. Amphibia, caudate, salamandridae | 20. Gills |
| 1. (2 pt) any two   Lack of rib or costal grooves, rough skin, or fronto-squamosal arch | 21.greater surface area for oxygen absorption |
| 10. 4 | 22. Don’t have hind limbs |
| 11. 5 | 23. mucous cocoon in mud |
| 12. 2 | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |

**Station 6: Reptiles I**

|  |  |
| --- | --- |
| 1. Carapace | 12. slows heart rate, shunts/diverts blood/switches to anaerobic metabolism |
| 1. Plastron | 13. Terrapene |
|  | 14. Omnivorous |
| 1. Does not retract | 15. Female |
| 1. Birth and laying eggs | 16. female |
| 1. Laid eggs | 1. Plastron |
| 1. Endangered/Vulnerable | 1. Ribs |
| 1. Female | 1. Skull |
| 1. B | 1. Malaclemys |
| 1. C | 1. Salt marshes/brackish water |
| 1. Allows for rapid exchange of gases   Can quickly fill in a single breath | 1. May/June |

**Station 7: Reptiles II \_\_\_\_\_\_\_\_\_\_/21 points**

|  |  |
| --- | --- |
| 1. Iguana | 11. Lower |
| 1. Herbivorous | 1. Defense only |
| 1. Parietal Eye | 1. Crotaphytidae |
| 1. Light Sensing | 1. Rocky outcroppings, deserts, plains |
| 1. Chelydridae | 1. Carnivorous, small lizards/insects |
| 1. It doesn’t fit into its shell | 1. Anguidae, Ophisaurus |
| 1. Freshwater/riverine | 1. Day |
| 1. Males | 1. Jaw is inflexible |
| 1. Helodermatidae | 1. Tail breaks off to allow rest of animal to escape |
| 1. Semiarid | 1. Accept any **two**; moveable eyelids, external ear opening, head shapes |

**Station 8: Reptiles III \_\_\_\_\_\_\_\_\_\_/\_\_ points**

|  |  |
| --- | --- |
| 1. D | 12. Loreal |
| 2. anything that fits in mouth | 13. Viperidae, Agkistrodon |
| 3. gives off foul smell | 14. Ovoviviparous |
| 4. Snakes need to spend winter below the frost line. There are fewer of these locations in the north so they den together. | 15. A, C, E |
| 1. Ovoviviparous | 16. Nostril |
| 1. 10 – 40 | 17. Heat Sensing Pit |
| 1. Winter mortality is high | 18. Semiaquatic to terrestrial, found near sources of water |
| 1. C | 19. Boidae |
| 1. A | 1. Strangulation |
| 1. Triangular head | 21. Spurs/Hind Limbs |
| 1. A | 22. head scales overlap, body scales don’t |