

INSTRUCTIONS Southeastern PA Regional Science Olympiad 2008 Herpetology C Division

- 1. Be sure that your names, team number, and school name are on the answer sheet.
- 2. Be prepared to show your wristband and/or field guide if you are asked by the supervisor.
- 3. You have roughly twenty seconds to make the ID, plus twenty seconds *per question* for each slide. The slides will change automatically, without warning.
- 4. Answer all questions on the answer sheet. Spelling counts for scientific names. Write small, and write *legibly*. The supervisor cannot grade what cannot be read.
- 5. Tiebreaker questions are indicated with (T#). They count towards the overall grade, and are consulted sequentially in the event of a tie.
- 6. Point values are in parentheses for each question.
- 7. Nonsensical, inappropriate, or mocking answers will result in disqualification.



- 1. (3) List the order, family, and common name of this organism.
- 2. (1) What is the origin of the common name?
- 3. (2) What are the names for the top and bottom portions of the shell?
- 4. (1) What is its preferred habitat?



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- 5. (3) List the order, family, and common name of this organism.
- 6. (1) This organism keeps its external gills for its entire life. What is this characteristic called?
- 7. (1) (T1) This organism retains juvenile characteristics into its reproductive stage. What is this characteristic called?
- 8. (1) (T8) Why is this organism of particular interest in the medical community?
- 9. (1) How can this organism be made to metamorphose?



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- 10. (2) List the family name for each of the skulls shown at left.
- 11. (2) How can the skulls be told apart (two different ways)?
- 12. (1) These large reptiles have bony plates just under the skin. What are these structures called?
- 13. (1) (T2) Members of this family exhibit TSD. What does this acronym represent?
- 14. (1) (T10) Members of this family have teeth set in sockets. What is the term for this characteristic?





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- 15. (5) List the order, suborder, family, genus, and common name of this organism.
- 16. (2) There are Northern and Southern varieties of this organism. How are their respective reproductive strategies different?
- 17. (2) List two of this organism's defense strategies.
- 18. (1) What is its diet?





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- 19. (3) List the family, genus, and common name of this organism.
- 20. (1) How do members of this genus establish territories and/or challenge other males?
- 21. (1) This particular species occurs in PA. How many *other* members of this genus occur in PA?







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SLIDE 6





- 22. (3) Which of the images shows a venomous snake, and what is its family name and common name?
- 23. (1) What type of venom does it use?
- 24. (1) To what genus do the other two snakes belong?
- 25. (1) (T3) What type of mimicry is utilized by the other two snakes?



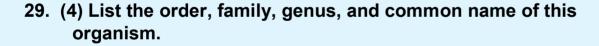
- 26. (4) List the order, family, genus, and common name of this organism.
- 27. (2) What is the name for the circular organ behind the eye, and what is its function?
- 28. (1) There are two geographically overlapping species represented here. How can they be told apart?



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- 30. (1) What is its preferred habitat?
- 31. (2) What adaptations does it have to its lifestyle (list two)?



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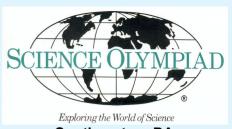
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- 32. (1) Which image shows a collared lizard?
- 33. (1) To what family and genus do the other two lizards belong?
- 34. (2) The collared lizard has a mythical misnomer. What is the erroneous name and why is it so?







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- 35. (4) List the order, family, genus, and common name of these organisms.
- 36. (1) These animals escape periods of intense heat or drought by utilizing what particular behavior?
- 37. (1) What is the ecological niche of these animals?
- 38. (1) (T4) What particular feature allows this animal to completely enclose itself inside the shell?



- 39. (3) List the order, genus, and collective common name of these organisms.
- 40. (1) What is their geographic range?
- 41. (2) Describe two elements of sexual dimorphism in these animals.
- 42. (1) What are the individual bony plates of the shell called?



SLIDE 11

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- 44. (1) Why is this particular species' scientific name a misnomer?
- 45. (1) Where does it get its common name?
- 46. (1) If cornered, what behavior will it exhibit?



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- 47. (3) List the family, genus, and collective common name of these organisms.
- 48. (1) What do the males' mating calls sound like?
- 49. (1) What do these frogs have that most frogs do not?





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- 50. (1) If these images are grouped by family, which one does not belong here?
- 51. (1) To what family does the oddball belong?
- 52. (1) To what family do the others belong?
- 53. (1) To what genus does the animal in image C belong?
- 54. (1) To what genus does the animal in image B belong?









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- 55. (3) List the family, genus, and common name of this organism.
- 56. (1) (T5) The male has "spurs" on either side of the vent. What are they?
- 57. (1) What is the geographic range?
- 58. (1) What is the term for its birth strategy?





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- 59. (3) List the order, family, and common name of this organism.
- 60. (1) This organism's call is sometimes likened to another animal (from a completely different taxonomic class!) What animal is it?
- 61. (2) What particular feature of the head does this organism possess, and what is its purpose?





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- 62. (3) List the family, genus, and common name of this organism.
- 63. (1) What region of the US has the greatest abundance of members of this genus?
- 64. (1) How do members of this family respire?
- 65. (1) (T6) What distinctive facial feature do members of this family possess?





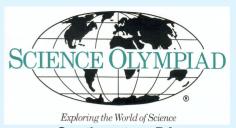
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- 66. (3) List the family, genus, and common name of this organism.
- 67. (2) Members of this family have a particular adaptation for locating prey animals. What is this anatomical feature, and how does it work?
- 68. (1) How does the rattle "grow"?
- 69. (1) What type of venom does it employ?







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- 70. (3) List the family, genus, and common name of this organism.
- 71. (2) (T9) Many species in this genus use an unusual form of reproduction. What is it called, and why is it unusual?
- 72. (1) What unusual feature do these organisms have on the belly?





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- 73. (3) List the family, genus, and common name of this organism.
- 74. (1) What is the origin of the common name?
- 75. (1) Why do the tadpoles of this genus tend to transform quickly?
- 76. (1) How can a breeding male be identified if he is not calling?

- 77. (1) List the family name of this organism.
- 78. (1) What is this stage of development called?
- 79. (2) (T7) What is the name and function of the structure indicated by the red arrow?
- 80. (1) How are the mouthparts adapted differently from those of an adult of this organism?



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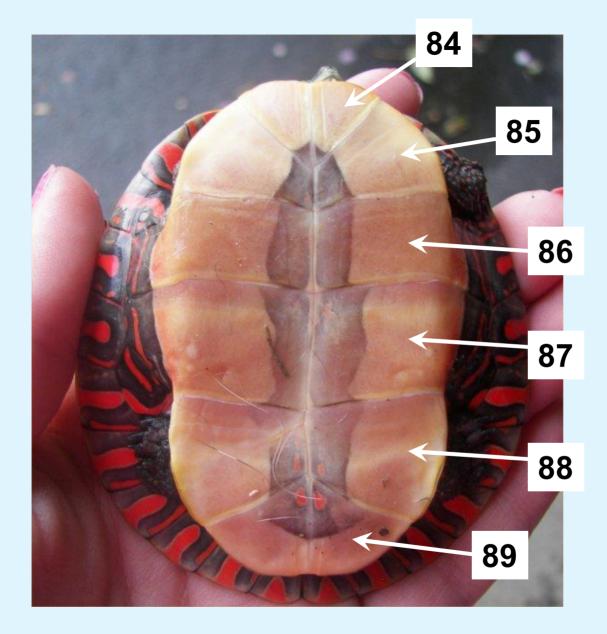






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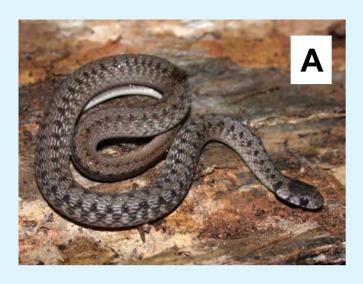
- 81. (1) If these images are grouped by family, which one does not belong here?
- 82. (1) To what family does the oddball belong?
- 83. (1) To what family do the others belong?

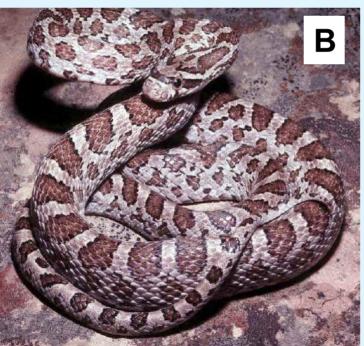




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84. – 89. Label the plates on the bottom of this turtle shell. (1 point each)





- 90. (1) If these images are grouped by family, which one does not belong here?
- 91. (1) To what family does the oddball belong?
- 92. (1) To what family do the others belong?



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Take 5 minutes to go back and answer questions that you remember.

YOU MAY NOT VIEW ANY SLIDES AGAIN. DO NOT ASK THE SUPERVISOR TO REPEAT QUESTIONS FROM ANY PARTICULAR SLIDE.

Make sure that your answer sheet has your names, school name, and school code on it.



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END OF EXAM