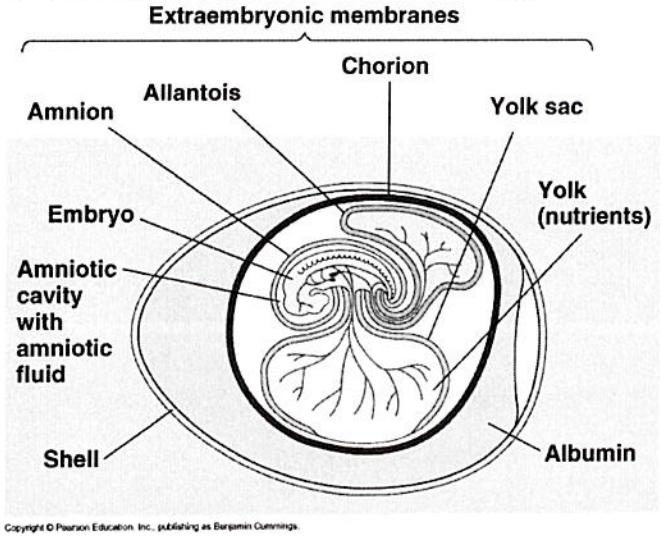
Biol 11

Ch 32 REVIEW: Reptiles and Birds

1. What are the characteristics that unify reptiles?
2. All of the above characteristics are adaptations for _____. Explain how this is true for each of the characteristics.
3. Label the diagram of the amniotic egg.



4. What do transition fossils tell us about the evolution of reptiles?
5. What is believed to be the cause of the extinction of the dinosaurs?
6. How do snakes eat? What enables them to eat that way?
7. How do snakes breathe when they are eating?
8. How do chameleons eat?
9. How are reptilian lungs better developed than amphibians? What other improvement to the respiratory system makes it work better than the amphibians?
10. What type of circulatory system do reptiles have?
11. What types of hearts do reptiles have? Describe them.
12. Label the diagram of the turtle.

13. How do reptiles get rid of their metabolic wastes?
14. What is the function of the cloaca – especially in desert-dwelling animals?
15. What is the difference between uric acid and ammonia? What is better for terrestrial animals to excrete? Why?
16. How is the reptilian brain different from the amphibian brain?
17. Describe the sense organs present in a snake. (hearing, smelling/tasting, heat sensors)
18. Describe the ears of a lizard. How are they like ours?
19. How do tortoises hear?
20. Compare the movement of an amphibian with that of a reptile and that of a mammal. Discuss the alignment of their limbs in the explanation.
21. How do reptiles reproduce? How do they develop their zygotes (most).
22. What is of interest to palaeontologists about tuataras?
23. What is the pineal gland of a tuataras? What is it being used for?
24. List some common (or infamous) examples of lizards.
25. What are the two parts of a turtle shell?
26. Lizards and snakes don't look anything like one another. Why are they in the same class?
27. What is the difference between turtles and tortoises?
28. What does ectoderm mean?
29. Why do ectoderms not generate as much heat inside their bodies as endoderms?
30. Why are endoderms able to hold on to the heat they generate better than ectoderms?
31. What is one disadvantage to ectodermy? How do reptiles overcome this disadvantage?
32. What is a disadvantage to endodermy?
33. Why are there not many larger reptiles in colder climates?
34. What are the characteristics that unify birds?
35. Describe the difference between contour, down and powder feathers.
36. What is a second way that ducks "waterproof" themselves?
37. What features does the fossils of *Archaeopteryx* exhibit that make palaeontologists believe it was one of the "in-between" species in the evolution of reptiles to birds?
38. Why do birds have to eat a lot of food compared to other animals their size?
39. What is the function of the trachea, crop, gizzard, and ureter in a bird?
40. Describe how the birds lung works.
41. Why is this a more efficient lung than ours?
42. What is the second function of the air sacs?
43. What type of heart does a bird have?
44. How do birds eliminate their nitrogenous wastes?
45. How is the cloaca involved in excreting the nitrogenous wastes?
46. How do marine birds deal with the excess of salt in their diet?
47. How do bird brains compare to reptile brains?
48. What senses do birds use for migration?
49. Describe the structure of birds bones.
50. What adaptations do birds have to decrease the amount of weight they carry?

51. How are the muscle for flight attached to the skeleton?
52. How do birds mate?
53. How do birds eggs differ from reptile eggs?
54. How do some male birds attract females for mating?
55. Label the diagram of the internal structures of a bird. Be sure to know the functions of each of the structures.

56. Label the diagram of a birds lung.