

Biology I - diy NOTES

Name _____

Chpt 31.2

Date _____ Hour _____

Birds

Read Chapter 31.2 in your text, pages 826-833. Fill in the blanks (or answer the questions) below using the information you have read.

1. The adaptation of flying was an advantage because of a huge source of _____ and a _____ from land-dwelling _____.
2. Birds are in the Class _____.
3. Fossil evidence indicates birds evolved from: _____
_____.
4. Birds have _____ and protein _____ on their feet.
5. Fertilization in birds is _____, and _____ are produced.
6. Although some birds are flightless, _____ birds have _____ and _____.
7. Feathers are _____, modified protein _____ that provides _____ and enables _____.
8. What is the purpose of preening?
9. What is molting?
10. Another adaptation for flight in birds is the modification of the _____ into _____. Powerful flight _____ are attached to a large breastbone called the _____ which is important for _____ of the force produced by the muscles as they generate the _____ needed for _____.
11. Flight also requires _____.

12. Birds have a _____ chambered heart, that _____ moves the blood throughout the body.

13. Unlike the respiratory system of a human, a bird's respiratory system supplies _____ air to the _____ when it _____ as well as when it _____.

14. During inhalation:

fig 31.14

- oxygenated air passes through the _____ and into the _____.
- **most** of the oxygenated air however passes directly into the _____.

During exhalation:

- deoxygenated air from the _____ is exhaled and
- _____ air from the _____ moves to the lungs.

At the next inhalation:

- deoxygenated air from the _____ moves to the _____ and
- oxygenated air moves to the lungs and posterior air sacs.

At the next exhalation:

- air passes from the _____ out of the _____
- and oxygenated air moves to the lungs and posterior air sacs.

15. Birds are _____therms. What does this mean?

16. How do feathers reduce heat loss in cold temperatures?

17. What 3 things can birds do in response to high temperatures?

18. What is an advantage of being endothermic?

19. What is a disadvantage of being endothermic?

20. Unlike the _____ shell of reptiles, bird eggs have a _____ shell.

21. Birds lay their eggs in a _____, and _____ them to keep them warm. The eggs are also _____ periodically so that they _____ properly.

22. Birds are all very much _____ in their basic form and

_____ . However they do exhibit specific _____
depending on the _____ in which they live.

<u>Bird:</u>	<u>adaptation:</u>	<u>purpose:</u>
ptarmigans	_____	_____
penguins	_____	_____
owls	_____	_____

23. The _____ of a bird's _____ or bill gives clues to the
kind of _____ the bird eats.

<u>Bird:</u>	<u>shape of beak:</u>	<u>type of food/method of eating:</u>
hummingbird	_____	_____
hawks	_____	_____
pelicans	_____	_____
cardinal	_____	_____