

Vertebrate & Invertebrate Exam Review Guide

Animals: General Knowledge

1. Identify the traits that all organisms in Kingdom Animalia share.
 - 1.) Cell number - _____
 - 2.) Mode of nutrition - _____
 - 3.) Cell Wall absent of present - _____

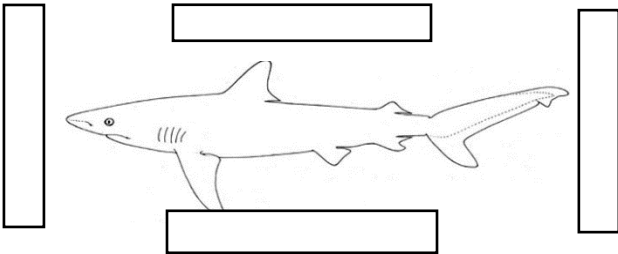
2. How do **heterotrophs** get nutrients for energy?

3. a. What does **motile** mean?

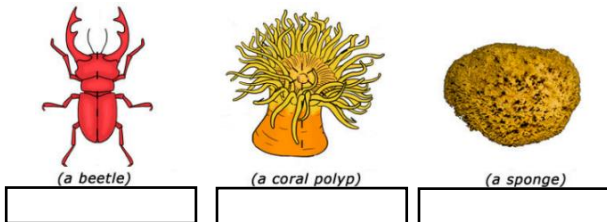
- b. What does **sessile** mean?

- c. Provide an example of a **sessile organism** is.

4. Label the following: **dorsal, ventral, anterior, and posterior**



5. Draw and label the type of symmetry shown in the diagrams below.
(radial symmetry, bilateral symmetry and asymmetry.)



6. List the **levels of organization** given below from simplest to most complex.
(organs, Cells, tissues, organ systems, organisms, organelles)
1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
7. In a human, give three examples of an organ.
- a. _____
 - b. _____
 - c. _____

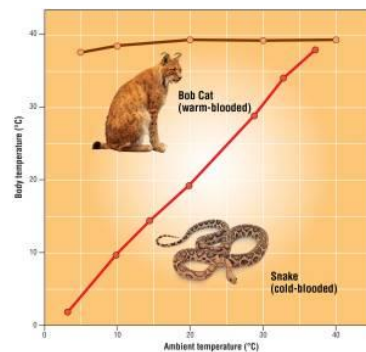
8. For each phylum listed below, write which kingdom (eubacteria, archeabacteria, protista, fungi, plantae or animalia) it would belong in.

<u>Kingdom</u>	<u>Phylum</u>
	Porifera
	Cnidaria
	Platyhelminthes
	Nematoda
	Annelida
	Arthropoda
	Mollusca
	Echinodermata
	Chordata

9. Identify (a) the **least evolved animal phylum** and (b) the **most evolved animal phylum** of animals.
- a. _____
 - b. _____
10. Define **Ectotherm**. _____
Define **Endotherm**. _____
11. What is the function of the **respiratory system** in animals, what two gases are exchanged?

12. What is an **endoskeleton**? _____
What is an **exoskeleton**? _____
What is a **hydroskeleton**? _____

13. According to this graph which animal is an



Endotherm: _____

Ectotherm: _____

14. What is used to group animals into their different phyla?

15. Define **complete digestive system**.

Define **incomplete digestive system**.

16. What is the function of the **circulatory system**?

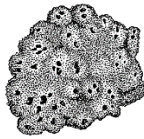
17. What is the function of the **respiratory system**?

18. What protein is an exoskeleton made of? _____

19. Yes or No: Do arthropods have joint appendages? _____

Invertebrates

Porifera



20. What type of symmetry do they exhibit? _____

21. By what process do sponges get oxygen and food?

22. Sponges respire oxygen, circulate nutrients and excrete waste all by which type of transport? _____

23. (Circle one) Are sponges **Sessile** or **mobile**?
Do sponges have tissues? (Circle one: YES or NO)

Platyhelminthes

24. What is the general term to describe these types of worms? _____



25. Many of these worms are parasitic. What does this mean? _____

Cnidaria

26. What characteristic is unique to Cnidaria that can immobilize prey?



Nematoda

27. What is the general term to describe these types of worms? _____



28. Nematodes developed the first **complete digestive tract**, which means they have a true mouth and anus. Is this called incomplete or complete digestive system?

Mollusca



29. Symmetry of a snail? _____

30. What do some mollusks, such as snails and clams, have that aid in protection? _____

Echinoderms

31. Draw the planes (lines) to show it has radial symmetry.



Annelida

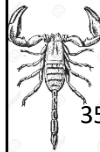
32. What is the general term to describe these type of worms? _____

33. What is an example of an annelid? _____

34. Label the earthworm's dorsal and ventral side.



Arthropods



35. What protein is an arthropod's exoskeleton composed of? _____

36. Do Arthropods have an open or closed digestive system?



Vertebrates

Chordata

37. All vertebrates are classified into what phylum?

38. Do vertebrate cells have a **cell wall**? _____

39. **Which of the following are examples of vertebrates** (circle them):

<i>Humans</i>	<i>Octopus</i>	<i>Snails</i>
<i>Cats</i>	<i>Sponge</i>	<i>Squid</i>
<i>Spider</i>	<i>Frog</i>	<i>Sea star</i>
<i>Cricket</i>	<i>Shark</i>	<i>Cow</i>
<i>Dogs</i>	<i>Fly</i>	<i>Lady Bug</i>

Fish

40. What is the **primary function of gills**?

Amphibian

41. Where must they lay their eggs? _____

Birds

42. Do birds have an open or closed circulatory systems?

Reptiles

43. Are reptiles endothermic or ectothermic?

44. How do reptiles and other ectotherm animals control their body temperature?

Mammals

45. List three features unique to mammals.

1. _____

2. _____

3. _____

46. True or False: Amphibians, birds, reptiles, and mammals are all chordates? _____

47. Describe the nervous system of mammals.

Are their nerve cords dorsal or ventral? _____

Bring a pencil or blue or black pen to fill in your scantron!