Study questions - test 2

Molluscs

characteristics

1) what is a radula, how does it work?
2) know the shell layers, and what comprises them?
3) know the basic anatomy of molluscs.
4) know the larval forms of molluscs.

small mollusc groups

5) know the smaller groups, and some basic characteristics.
6) Why is the "ladder" model for thinking about evolution misleading and wrong?

gastropods

7)What are the types of coiling in gastropods?
8)What is torsion? What are the pros and cons of torsion?
9)how does respiration work in gastropods?
10)What are the subclasses of gastropods?

bivalves

11)how does feeding work in bivalves?
12)what does the term "bivalve" mean?
13)how do pearls form?
14)how does respiration work in bivalves?
15)what is the special veliger found in freshwater bivalves?
16)what is the circulatory system like in bivalves?

cephalopods

17)how does the Nautilus maintain its buoyancy?
18)What's up with cephalopod shells?
19)how do cephalopods feed?
20)what is the circulatory system like in cephalopods?
21)what are the subclasses of cephalopods?
22)what are the orders of coleoidea?
23)what is the difference in arms and tentacles?
24)how does color change work in cephalopods?
25)how does reproduction work in cephalopods?

Annelids

26)what are the benefits of metamerism?
27)what phyla possess metamerism?
28)know the general anatomy of annelids.

polychaetes

29)know the parts of the annelid head.
30)what is an atoke? epitoke?
31)what are siboglinids?

clitellata

32)where do oligochaetes get their name?
33)what is the relationship between oligochaetes and hirudinea?
34)how do leaches feed?
35)how do earthworms reproduce?
36)how do clitellata exchange gasses?

Nemata

anatomy

37)what type of body cavity to nematodes possess?
38)what is the cuticle of nematodes made of?
39)how do nematodes move?
40)how is the nervous system of nematodes set up?
41)how does food move through the digestive tract of nematodes?

diversity

42)know some of the parasitic nematodes we talked about, and a little about their life cycles.
43)what are filarial roundworms?
44)what are mermithid nematodes?

smaller ecdysozoa

45)Review characteristics and phyla in each group.
46)Review the basic tree from the website.

chelicerates

47)why have the arthropods been so successful? insects?
48)how does ecdysis work?

49)know the basic characteristics of chelicerates.
50)know the classes and orders of chelicerates that we discussed.
51)how do horseshoe crabs exchange gases?
52)what are sea spiders?
53)what does chelate mean?

spiders

54)what are the suborders of spiders?
55)what are the two types of cheliceral fang orientations in spiders?
56)how do spiders reproduce?
57)know the basic anatomy of spiders.
58)what are the two tagmata in spiders?

scorpions

59)know the basic anatomy of a scorpion.
60)how do scorpions feed? what do they eat?

mites

61)know some of the parasitic mites that we talked about.

diversity

62)know the smaller groups of arachnids that we talked about.

crustaceans

anatomy

63)know the basic anatomy of a crustacean.
64)what does biramous mean?
65)how do crustaceans exchange gases?

classes

66)know the basic groups of crustaceans, and characteristics of each.
67)what are rollypollies?
68)how do most malacostracans exchange gases?
69)how do pillbugs exchange gases?

hexapods

70)how are the hexapods related to crustaceans?

insects

71)why have the insects been so successful?
72)what are simple eyes? what are compound eyes?
73)what is batesian mimicry?
74)what is müllerian mimicry?
75)what is crypsis?
76)what is kin selection?
77)what is eusociality?

orders of insects

78)know the following orders of insects:

- coleoptera
- thysanura
- hemiptera
- homoptera
- orthoptera
- isoptera
- hymenoptera
- diptera
- lepidoptera
- siphonaptera
- odonata