Revision questions

Porifera

1. How many organ systems sponges (Porifera) have?
2. Is the group of Porifera an ancient or a modern group of animals?
3. Where do sponges (Porifera) live?
4. Name four types of cells present in body structure of Porifera.
5. What is the name of protein which forms flexible soft body tissue of sponges?
6. Collar cells in the inner part of sponge have flagella. What are these flagella used for?
7. Sponges can reproduce sexually as well as asexually. Describe the sexual or asexual reproduction?
8. Where do we use sponges in daily life? Name at least two examples.
9. How many species are there in phylum Porifera:
   a) < 100
   b) 2000
   c) 1500
   d) 5000
10. Species from Porifera group live in light/dark places and can/cannot be involved in symbiotic relationship with animals/bacteria. They can produce yellow/toxic chemical for protection.

Cnidaria

1. Name at least 3 organism of Cnidaria which live in the sea.
2. How many cell layers have Cnidaria and how we call them?
3. What surrounds mouth/anus of Cnidaria?
   a) gastrodermis
   b) body stalk
   c) tentacles
4. What type of digestive system Cnidaria have? Describe how it works?
5. Which two body forms of Cnidaria do we distinguish?
6. What helps Cnidaria with orientation in space and hunting?
7. Not all the organ systems of Cnidaria are organised. Name at least two which are not.
8. Are Cnidaria sensitive to pollution?
9. Which class of Cnidaria contain the most poisonous animal?
10. Do Hydrozoa live individually or tend to live in colonies?
Platyhelminthes

1. There are three layers forming body of flatworms. Name them.
2. Describe the life cycle of tapeworm.
3. Describe the picture:

![Picture of a tapeworm]

4. List three classes belonging to Platyhelminthes.
5. Explain the term bilateral symmetry.
6. True/false
   - Platyhelminthes are hermaphrodites.
   - Cestoda are adapted for free-living life.
   - Trematoda need a host to live.
7. Draw and explain what the scolex is.
8. Describe the difference between endoparasite and ectoparasite.
9. Explain following terms:
   - tegument
   - proglottids
   - ganglia
10. Try to explain how you can get a flatworm into your gut.

Nematoda

1. Where can we find species from the group Nematoda?
2. What is the role of cuticule covering the body of some Nematoda?
3. What is hydroskeleton used for?
4. What does term gonochorist mean?
5. True or false
   - Nematoda are able to move thanks to longitudinal muscles while flatworms are moving thanks to parapodia.
6. Elephantiasis is the parasitic disease caused by Wuchereria bancrofti from group of Nematoda. What are the physical symptoms of this illness?
7. True or false
Revision for small test II.A

Sexual dimorphism is typical for species of Nematoda. Female are usually larger than males.

8. Slovak translation of *Ascaris lumbricoides*
   a) hlísta detská
   b) mrľa ľudská
   c) voš vlasová
   d) ploštica posteľná

9. Nematoda is strictly parasitic group of animals. True or false
10. Helminthiasis is a group of diseases caused by worms. True or false

**Annelids**

1. List four general characteristics of Annelids.
2. Draw and describe a simple structure of earthworm (Oligochaete).
3. Annelids live in symbiosis with other organisms. Name at least two examples of these symbiotic partners.
4. True or false
   - Annelids have two-way digestive system.
   - Annelids have simple brain and dorsal nerve cord.
   - Annelids have open circulatory system.
   - Annelids are gonochorists.
5. Explain following terms:
   - protostomium
   - mucus
   - setae
   - cephalisation
6. Fill the sentence:
   Three classes of segmented worms are: _____________, _____________ & _____________ (based on number of setae and presence or absence of parapodia).
7. What is clitellum used for?
8. Try to explain why earthworms are called like that?
9. In the group of Hirudinea:
   - Do the species have setae or parapodia?
   - Are there any parasitic species?
   - What are the suckers (anterior and posterior one) used for?
10. Try to draw/sketch and describe the function of nephridia in the body of Annelids.

**Mollusca**

1. Name at least three animals which belong to phylum Mollusca.
2. Muscular foot is used for movement. Which animals used and in which species it has changed into other structures.
3. The group of Mollusca is divided into 3 classes which are:
   a) Gastropoda, Trematoda, Chelicerata
   b) Arachnida, Annelida, Bivalvia
   c) Cephalopoda, Gastropoda, Bivalvia
4. Which species belong to the group of Gastropoda (3 examples)?
5. Give three characteristics of Cephalopoda:
6. What is the difference between aquatic and terrestrial Mollusca regarding respiratory system?
7. What is the function of radula?
8. Which group of Mollusca has an ability to learn?
9. Describe how the circulatory system in Mollusca works.
10. Fill:

**Arthropods**
1. Give three main characteristics of the Arthropod group of animals.
2. Which of four main classes of Arthropods contains only fossil animal species?
3. Malpighian tubules are part of ______________ system.
4. What type of circulatory system do the Arthropods have?
5. Give three examples of sense organs present in Arthropods.
6. Why do Arthropods need to molt?
7. What is the difference between incomplete and complete metamorphosis?
8. Give an example of species with incomplete metamorphosis.
9. Give an example of species with complete metamorphosis.
10. Give five examples of insect influence on human life.
Chelicerata

1. Name two classes of Chelicerata and give one example.
2. There are three types of modified legs in this group. What are their names and how are they used?
3. True or false
   - Xiphosura is a marine class
   - Horseshoe crab is a true crab which belongs to class of Xiphosura
   - Xiphosura use book lungs to breath.
4. What are ocelli?
   - a) compound eyes
   - b) simple eyes
   - c) type of venom
   - d) special hair on thorax
5. What are tracheal tubes used for?
   - a) for breathing
   - b) for feeding
   - c) for excretion
   - d) for attacking predator (with poison)
6. What are two species of ticks you can run across in our nature?
7. What do the ticks need to molt?
   - a) sesame seed
   - b) insect
   - c) blood meal
   - d) warm weather
8. How do we call the structure at the end of the scorpion abdomen?
9. Which of these diseases ticks can carry?
   - a) Malaria and Lyme disease
   - b) Ebola and malaria
   - c) Lyme disease and Rocky mountain spotted-fever
   - d) Sleeping disease and encephalitis
10. It has cephalothorax and a long segmented abdomen curled over body, prefer dry regions and chase in the night. What animal is it?

Crustacea

1. Give three examples of marine Crustacea.
2. What do marine Crustacea use to breath: gills or book lungs?
3. Where can we find representatives of Isopod group?
4. Write two characteristics of Isopods.
5. What Isopods do for their protection?
   - a) They change their color.
   - b) They roll into a ball.
   - c) They hide under the leaves.
6. What is the role of green gland in crayfish?

7. How does crayfish use antennules?
   a) for balance, touch and taste
   b) for capturing food
   c) for protection
   d) for movement

8. What are the swimmerets used for?

9. Which is the largest group of Crustacea?

10. Translate:
    crayfish
    gills
    antenna
    cheliped

Insect

1. Which insect can hover like a helicopter?
   a) silverfish
   b) termites
   c) dragonfly
   d) walking stick

2. I am wingless with long antennae and three thread-like filaments at the tip of abdomen. And I usually live under stones but can be find in the bathrooms as well.
   a) dragonfly
   b) honey bee
   c) termites
   d) silverfish

3. Which insect feed on wood and digest it with the help of microbes in their digestive system?
   a) bumble bee
   b) mosquito
   c) termites
   d) mantis

4. Which insect transmits bacterium that causes plague?
   a) lady beetle
   b) fleas
   c) mosquito
   d) sucking lice

5. It a predator waiting motionless for its prey. Its front legs are greatly modified for grasping prey.
   a) mantis
   b) grasshopper
6. Which of these insects are not predators:
   a) lady beetle
   b) dragonfly
   c) mantis
   d) chewing lice

7. It is a social insect with sting at the abdomen and feeds on flower nectar. It is an important pollinator.

8. Which insect spread diseases like yellow fever and malaria.
   a) bees
   b) flies
   c) mosquitoes
   d) lice

9. This insect is the master of camouflage (mimicry), usually lives in shrubs and trees. The species are able to regenerate their lost legs.

10. This insect is an important crop pest. It can fly long distances and has various leg modifications (ex. for jumping or stridulating).