

## Domáce úlohy pre 4. ročník biológia

1. Find 15 viral and bacterial diseases. Classify them according to the type of organism that the disease causes. Give some symptoms, treatment and prevention.
2. Find information on the original plants during prehistory and compare their features and differences with today's plant species.
3. How do fungi help and harm us? (search, select relevant information, justify)
4. Try to explain how the development of the circulatory system is related to body temperature in different animal species.
5. Why has asexual reproduction changed to sexual in higher organisms? Compare the advantages and disadvantages of both types of reproduction.
6. Find diseases caused by protostomes. Create a list of diseases in order of severity.
7. Describe the communities in which insects live, their hierarchy, communication and habits.
8. Choose an animal of the mammalian class; find the necessary information about it and compare it with man.
9. Identify the major environmental problems in your area and suggest solutions. (attach photos)
10. Express your positive or negative opinion of GMOs.

## Domáce úlohy pre 5. ročník biológia

1. Compare the bones, muscles and movement of the human leg and the hind leg of a horse.
2. Explain the consequences of smoking on the blood, heart, blood vessels and airways.
3. a, Compile a diet according to the rules of good nutrition for one week. Keep track of your usual diet for two days. Compare these two diets.  
b, With reference to pyramids of energy explain why it takes a smaller area of agricultural land to provide food for a vegetarian compared to someone with a high protein diet.
4. For a person with an impaired hypothalamus? - try to create a list of disorders, diseases and defects that can occur.
5. Express your opinion: why do more and more people suffer from infertility?
6. The body's defence system may cause problems if a blood transfusion is carried out without pre-testing for the compatibility of the blood groups of the donor and the recipient. Explain clearly the possible causes of failure of a transfusion of Group A blood into an individual with Group O.
7. Find the solution to this example:  
In humans, there is a gene locus for blood type. The three alleles are A, B, and O. A and B are codominant to each other and dominant to O. Genotypes AA and AO give blood type A. Genotypes BB and BO give blood type B. Genotype AB gives blood type AB. And genotype OO gives blood type O. A man of genotype AB marries a woman of genotype BO. If they have eight children:
  - i) On average, how many will have blood type A?
  - ii) On average, how many will have blood type B?
  - iii) On average, how many will have blood type AB?
8. Suggest why rats that live in deserts have a longer loop of Henlé than rats that live in habitats with a plentiful water supply.
9. What is Darwin's contribution to the theory of evolution? Explain his theory of natural selection.
10. Assemble the genetic lineage from your great-grandparents to yourself. A determining feature is the colour of the eyes.