**1. Read the text.**

**Classification since Linnaeus**

Classification since Linnaeus has incorporated newly discovered information and more closely approaches a natural system. When the life history of barnacles (морская уточка (ракообразное) ) was discovered, for example, they could no longer be associated with mollusks because it became clear that they were arthropods (jointed-legged animals such as crabs and insects). Jean-Baptiste Lamarck, an excellent taxonomist despite his misconceptions about evolution, first separated spiders and crustaceans from insects as separate classes; he also introduced the distinction, no longer accepted by all workers as wholly valid, between vertebrates—i.e., those with backbones, such as fishes, amphibians, reptiles, birds, and mammals—and invertebrates, which have no backbones. The invertebrates, defined by a feature they lack rather than by those they have, constitute in fact about 90 percent of the diversity of all animals. The mixed group “Infusoria,” which included all the microscopic forms that would appear when hay was let stand in water, was broken up into empirically recognized groups by the French biologist Felix Dujardin. The German biologist Ernst Haeckel proposed the term Protista in 1866 to include chiefly the unicellular plants and animals because he realized that, at the one-celled level, there could no longer be a clear distinction between plants and animals.

The process of clarifying relationships continues—only in 1898 were agents of disease discovered (viruses) that would pass through the finest filters, and it was not until 1935 that the first completely purified virus was obtained. The German botanist Wilhelm Hofmeister in 1851 gave the first good account of the alterations of generations in various nonflowering (cryptogamous) plants, on which many major divisions of higher plants are based.

**2. Answer the questions.**

1. Who separated spiders and crustaceans from insects as separate classes?

2. What was Felix Dujardin’s contribution to classification?

3. How much of the diversity of all animals do the invertebrates constitute?

4. When was the term Protista proposed?

5. Why did Ernst Haeckel propose to include the unicellular plants and animals into the same group?

6. What important discovery was made in 1898?

7. What are many major divisions of higher plants based on?

**3. Say if the sentences are true or false.**

1. Jean-Baptiste Lamarck was an excellent taxonomist and a great supporter of the evolution theory.

2. Viruses would pass through the finest filters.

3. The first completely purified virus was obtained in 1898?

4. Many major divisions of higher plants are based on Wilhelm Hofmeister’s account of the alterations of generations in nonflowering plants.

**4. Complete the sentences.**

1. Classification since Linnaeus has incorporated newly discovered information and ……..

2. The invertebrates are defined by ……

3. There could no longer be a clear distinction between plants and animals and that is why …..

4. It was Wilhelm Hofmeister who …..

**5. Complete the gaps in the text with the words below.**

*Formation, evolution, interbreeding, variation, phylogenetic tree*

The long-term impact of Darwinian …… has been different and very important. It indicates that the basic arrangement of living things, if enough information were available, would be a …… rather than a set of discrete classes. Many groups are so poorly known, however, that the arrangement of organisms into a dendrite is impossible. Many groups, especially at the species level, show great geographical ….. , so that a simple definition of species is impossible. Difficulties of classification at the species level are considerable. Many plants show reticulate (chain) evolution, in which species form, then subsequently hybridize, resulting in the ….. of new species. And because many plants and animals have abandoned sexual reproduction, the usual criteria for the species—……. within a pool of individuals—cannot be applied. Nothing about the viruses, moreover, seems to correspond to the species of higher organisms.