

Working with the determinants of fish

.Objective: Learn to use determinants of fish and identify fish species

Materials and equipment: Set for determination: fixed preparations of various groups of cyclostomes and fish; cuvettes, dissecting needles, tweezers, magnifier (4–6-x);
.determinants of fish

Basic theoretical information

Defining tables are compiled on the basis of the fundamentals (abstract) and the counter fundamentals (antithesis). There are numbers such as 1 (3) in front of each thesis and antithesis, the first of which is the thesis which is given without brackets, and the second is the antithesis is in parentheses. Definition comes to comparing characteristics that are resulted in the thesis and antithesis, and to the subsequent decision which of them corresponds to features of determined fish. If thesis or antithesis is suitable, but they do not have the title of taxonomic categories, the following serial number of theses should be read its contents should be compared with the contents of its antithesis. So, moving step by step, the title of determined taxonomic category should be reached. Using the table, it can be .determined which class examined representative belongs to

Mouth has as a shape of sucking funnel or round, surrounded by antennae, jaws are (2) 1 absent. One nasal opening. Pair fins and their belts are absent. Body is eel-shaped and .naked... Class cyclostomes Cyclostomata

.Presence of jaws. Nasal opening is paired. There are paired fins and their belts (1) 2

No skeletal gill covers. The body is covered with placoid scales or naked. Males have (4) 3 .claspers in the pelvic fins... Class Chondrichthyes Chondrichthyes

Bony gill covers. The body is covered with bony or ganoid scales, sometimes it is (3) 4 .naked... Class bony fishes Osteichthyes

After defining the class of representative in this table, it is necessary to start work with determinants. After the determination Latin name of every taxonomic category, which the .present representative belongs to and main features of the family is written to notebooks

