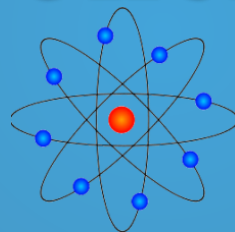




Russia
Voronezh



Voronezh-1



IYNT 2015

Work performed pupil 10B class:

Elfimova Evgeniya

Structure of a hair

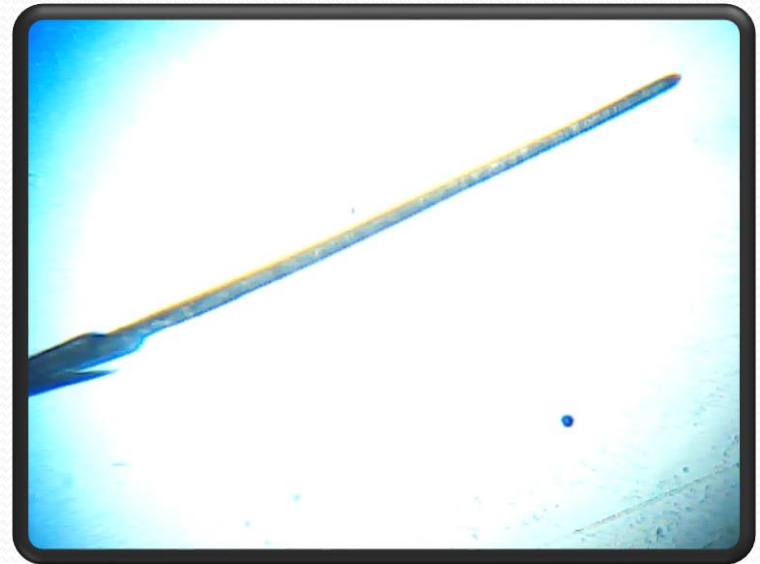
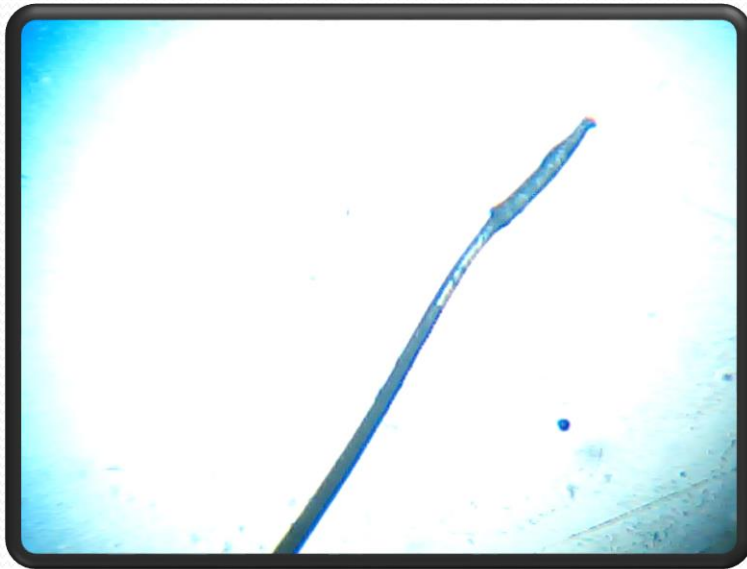
- The hair of various animals may significantly differ in their structure. What are these differences and how can you explain them?

Purposes

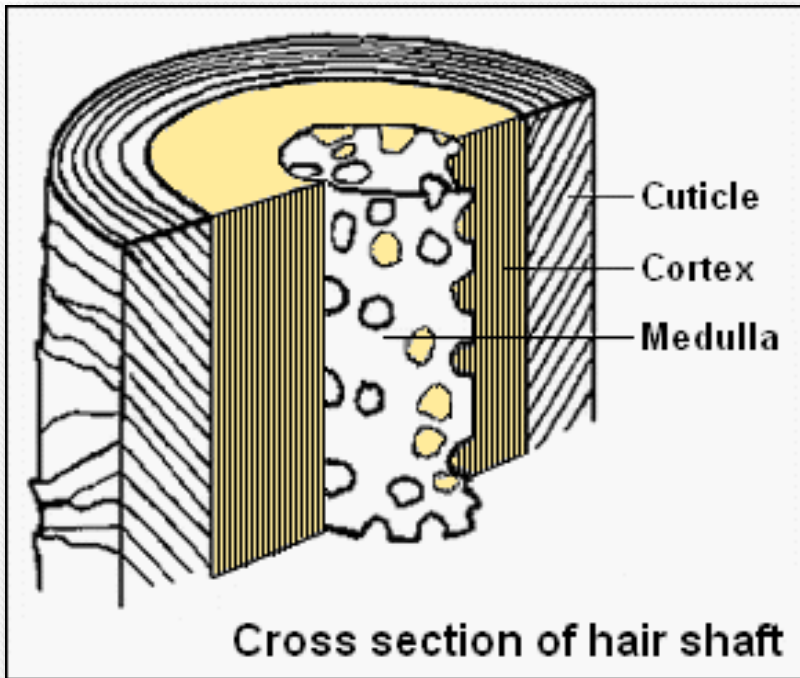
- Learn the structure of a hair of different animals
- Explain the results of experiment

Equipment

- Hair of different animals
- Microscope



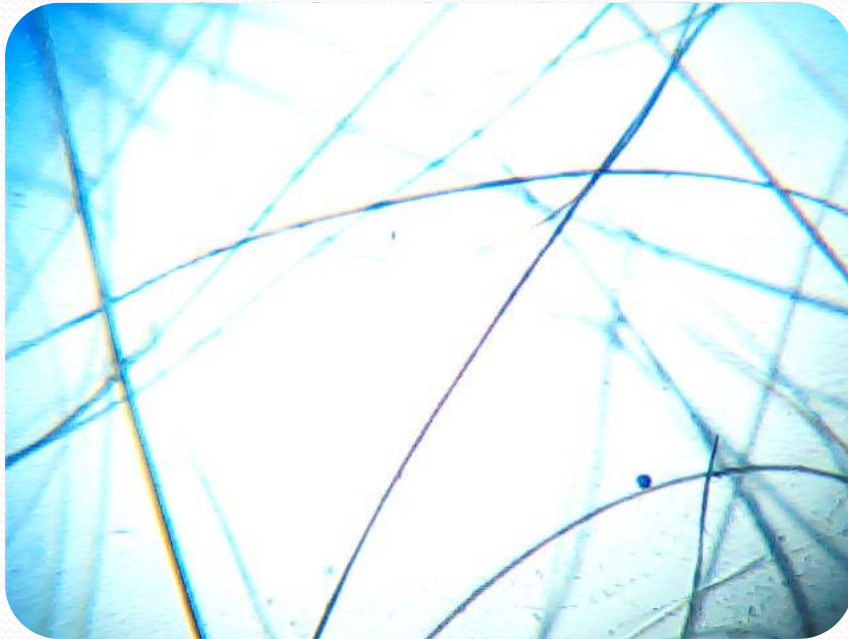
Structure of a hair



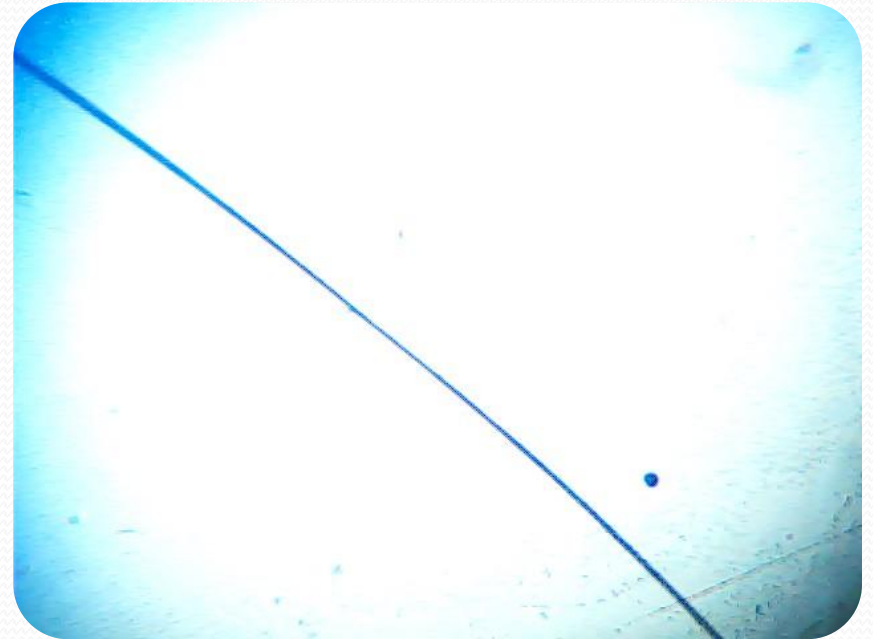
- The hair structure of the shaft has three layers: the cuticle (outer layer), cortex (middle layer) and medulla (inner layer).

Types of a hair

Down hair



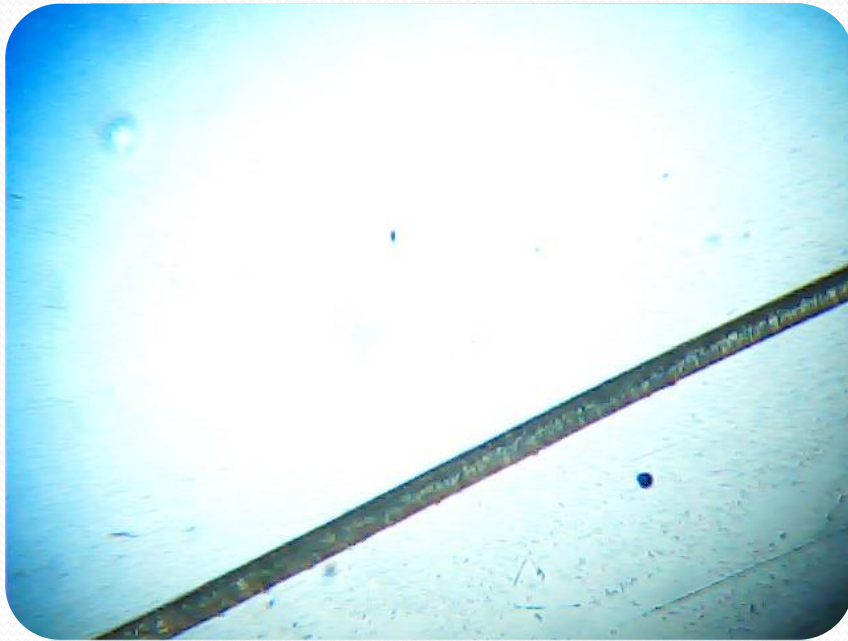
Ground hair



Hypothesis

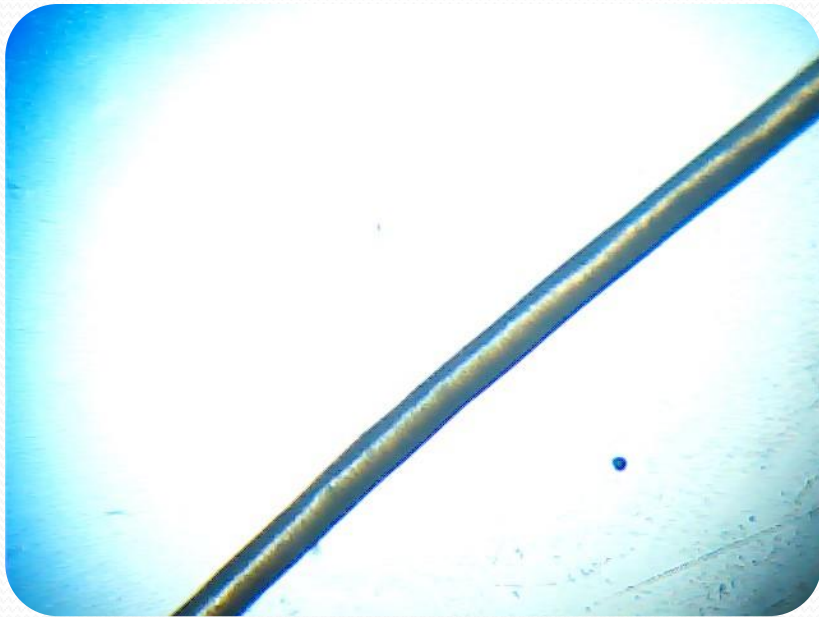
- Structure of a hair depends on function.

Human hair



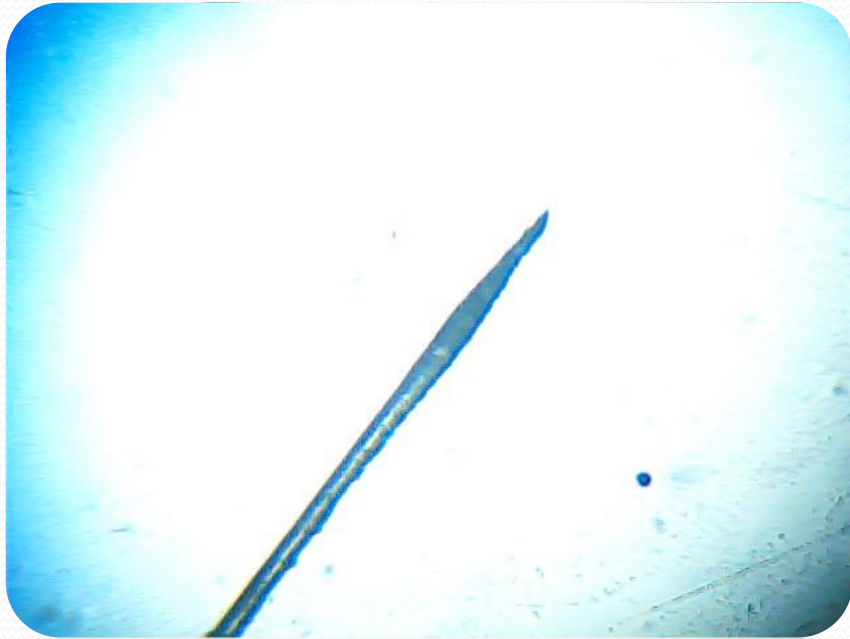
- There are medulla without air, cortex and cuticle. Obviously, the human hair can protect from injuries.

Bear hair



- There are a lot of air in medulla. This hair helps to protect from coldness and to get no injured.

Homeless dog

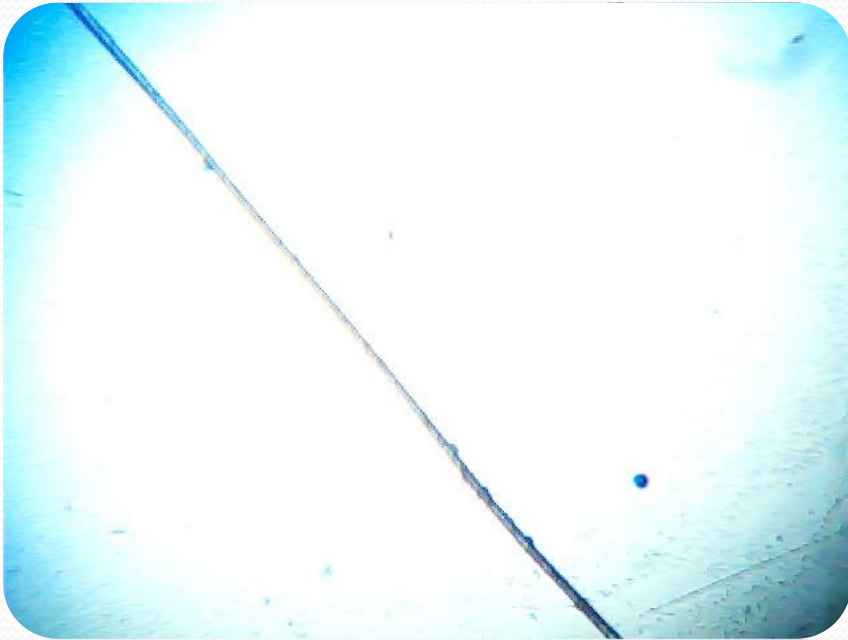


- This hair also has the air in the medulla. It protects dog from coldness and to get no injured.

Hypothesis

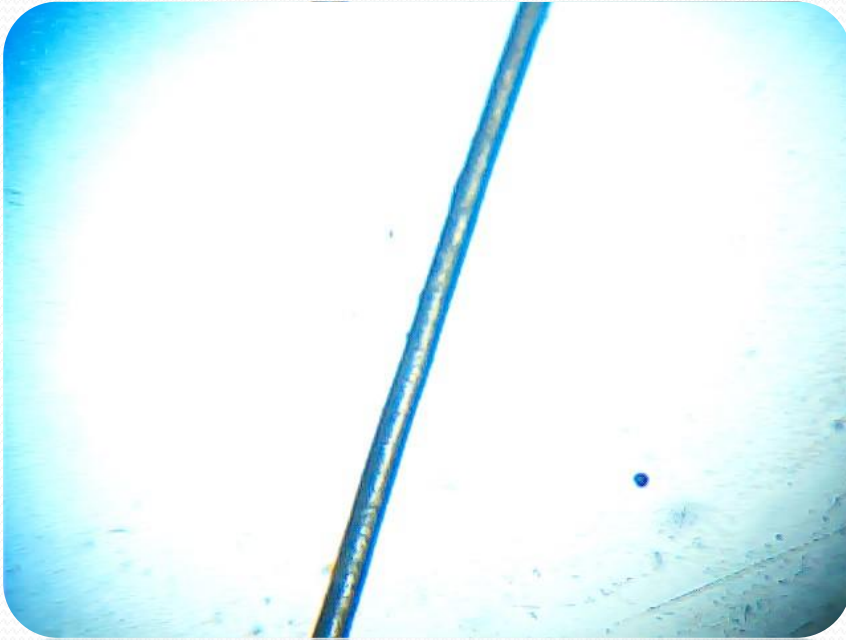
- Structure of a hair depends on evolution.

Rabbit



- On this picture we can see 3 layers: . This is result of evolution.

Guinea pig



- On this picture we can see 3 layers: the cuticle, cortex (middle layer) and medulla (inner layer). This is result of evolution.

Conclusions

- There are a lot of functions of hair: protection from coldness, heat and injuries.
- Structure of a hair depends on evolution.
- There are two types of a hair: down hair and ground hair.



Literature