

Animal Tissue and Organs—Blood Circulation

Topic or Concept

The circulation of blood through a human body is similar to the circulation of blood through a fish.

Objective

Student will be able to see the blood circulating through the body of a fish.

| Materials Available from Region 20 Living Science Materials Center | Enrichment Activity |
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| LM-111 Sterile Petri dishes (No Agar) LM-93 Goldfish | <p>Problem How can blood circulation be observed?</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. With the fishnet, remove the goldfish from the water. 2. Quickly wet some cotton in the fish water and wrap around the entire goldfish leaving only the tail uncovered. 3. Lay the fish in a petri dish. Place a slide over the tail and set the petri dish on a microscope stage. 4. Observe the blood circulating in the tail. <p>Questions</p> <ol style="list-style-type: none"> 1. On a separate sheet of paper, record what you observed. Why was it important to work quickly? 2. Were tiny blood vessels visible in the fish tail? 3. What color was the blood? Base your conclusions on information gained during your experiment. <p>Conclusion</p> <ol style="list-style-type: none"> 1. You should have seen blood flowing through tiny tubes. These tubes are called capillaries. 2. The blood in the capillaries was pumped from the heart into vessels called arteries. 3. The arteries branch into smaller and smaller vessels. 4. The capillaries carry blood to the cells of the body, then to larger vessels called veins. 5. Veins carry blood back to the heart. 6. The heart has two chambers, an auricle and a ventricle. Blood enters the auricle it then passes into the ventricle. From the ventricle it is pumped to the gills, where it releases carbon dioxide and picks up oxygen, which is dissolved in the water. 7. As the blood flows from the gills through the body and back to the heart, the oxygen is given to body cells and carbon dioxide is picked up from the cells. 8. Blood also transports food materials and waste products through the body. |
| <p>Not Available from Region 20 Living Science Materials Center</p> Microscope Slides Cotton Fishnet | |