

Fill in the Blank

1. Lymphatic pathways begin as capillaries that merge to form lymphatic vessels.
2. The wall of a lymphatic capillary consists of a single layer of epithelial cells.
3. Once tissue fluid is inside a lymphatic capillary the fluid is called lymph.
4. The structure of the walls of lymphatic vessels is similar to veins, but thinner.
5. Lymphatic vessels also have valves, similar to veins, to prevent backflow.
6. The lymphatic trunk that drains the head and neck is called the jugular trunk.
7. Lymphatic vessels usually lead to lymph nodes that filter the fluid being transported.
8. Lymph enters a node through a(n) afferent lymphatic vessel.
9. The indented region where blood vessels and nerves join a lymph node is the hilum.
10. Lymph nodes contain large numbers of white blood cells called lymphocytes and macrophages that fight invading microorganisms.

In the table below, summarize the function of each of the structures in the lymphatic system.

Structure	Function
Red Bone Marrow	blood cell and lymphocyte production
Thymus	site of T cell maturation
Spleen	filters the blood, contains red and white pulp
Lymph Nodes	filters pathogens and other foreign materials from the lymph

Short Answer

11. Explain the difference between the white and red pulp of the spleen, in both cell make up and function.

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red pulp: site of red blood cell production, makes up the majority of the spleen
white pulp: houses lymphocytes, site of antigen presentation

12. List the structures tissue fluid would pass through starting in the tissue and moving all the way to the veins (cardiovascular system). Include all the different parts of the lymphatic system discussed in the notes.

lymphatic capillaries, lymphatic vessels, lymph nodes, lymphatic duct, vein, heart