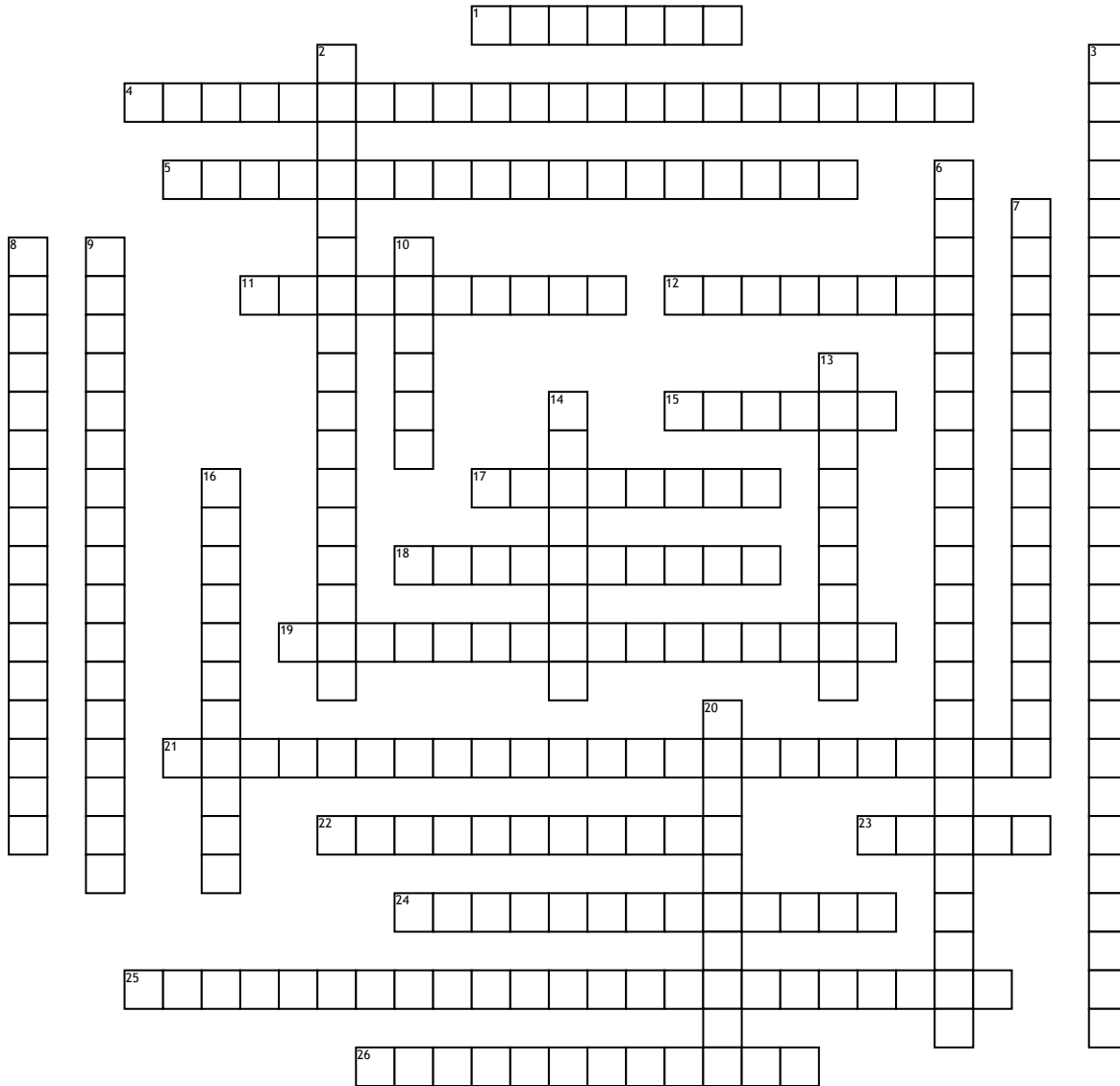


Name: _____

Date: _____

Lymphatics System



Across

1. usually with sore throat, fever, difficult swallowing, hoarseness or loss of voice, and tender or swollen lymph nodes.
4. the process of exposing the body to an antigen to generate an adaptive immune response
5. into the circulatory system at the left brachiocephalic vein between the left subclavian and left internal jugular veins.
11. Small bean-shaped glands that produce lymphocytes, filter harmful substances from the tissues, and contain macrophages,
12. back of the pharynx that usually obstruct the nasal and ear passages
15. filters blood, disposes of worn-out red blood cells, and provides a 'reserve supply' of blood.
17. lymphoid tissue at the back of the pharynx that usually obstruct the nasal and ear passages
18. that engulfs and consumes foreign material
19. infection or vaccination or by the transfer of antibody or lymphocytes from an immune donor

21. by the injection of antibodies, such as gamma globulin, that are not produced by the recipient's cells.

22. A cell that contains hemoglobin and can carry oxygen to the body. Also called a red blood cell (RBC).

23. Drains excess fluids and proteins from tissues all around the body and returns them back into the bloodstream.

24. are used to treat allergy symptoms and itching.

25. occurs when a person is exposed to a live pathogen and develops a primary immune response, which leads to immunological memory.

26. Walled, valved structures that carry lymph around the body

Down

2. from the right upper limb, right side of thorax and right halves of head and neck.

3. induced by a vaccine, a substance that contains antigen.

6. by the injection of antibodies, such as gamma globulin, that are not produced by the recipient's cells.

7. does not require prior sensitization to an antigen.

8. include anaphylaxis and allergic rhinoconjunctivitis.

9. A widespread and very serious allergic reaction. Symptoms include dizziness, loss of consciousness, labored breathing, swelling of the tongue and breathing tubes, blueness of the skin, low blood pressure, heart failure, and death

10. located between the breast bone and heart. It produces lymphocytes, is important for T cell maturation (T for thymus-derived).

13. a type of blood cell that lacks hemoglobin and is therefore colorless.

14. lymphoid tissue at the back of the pharynx that usually obstruct the nasal and ear passages

16. tissue cell of the immune system that may be fixed or freely motile, is derived from a monocyte, functions in the destruction of foreign antigens

20. hormone produced within the adrenal gland that quickens the heart beat, strengthens the force of the heart's contraction, and opens up the bronchioles in the lungs, among other effects.