V. Blood Vessels

1. Vessel walls made of 3 layers:
2. Tunica intima – slick inner layer.
3. Tunica media – middle layer of smooth muscle.
4. Tunica externa – outer layer of fibrous connective

 tissue for protection.

**tunica externa**

1. Arteries - vessels that carry blood ***away*** from heart.
2. Oxygen-rich blood (except for pulmonary artery).
3. Arterioles – smaller arteries.
4. Capillaries – smallest vessels where gas exchange

 happens between blood and body cells.

1. Veins – vessels that carry blood ***back*** to the heart.
2. Oxygen-poor blood (except for pulmonary vein).
3. Venules – small veins that drain capillaries.



**Capillary bed**

1. Differences between arteries and veins:
2. Arterial blood is under more pressure than venous blood.

 \*Arteries spurt, veins ooze.

1. The walls of arteries are thicker than the walls of veins.
2. Veins have valves that prevent backflow.

 \*less pressure and against gravity

 \*common site of blood clots

1. “Arteries pump, veins dump”



artery

vein

