

### Exercise 11.5:

- \_\_\_\_\_ 1. Damage to a blood vessel exposes \_\_\_\_\_ within its wall.
- \_\_\_\_\_ 2. This collagen attracts \_\_\_\_\_.
- \_\_\_\_\_ 3. Platelets release chemicals that
  - \_\_\_\_\_ a. cause blood vessel \_\_\_\_\_ (constriction, dilation) and therefore \_\_\_\_\_ (increase, decrease) blood loss,
  - \_\_\_\_\_ b. initiate the \_\_\_\_\_ pathway,
  - \_\_\_\_\_ c. increase platelet stickiness, resulting in \_\_\_\_\_ formation.
- \_\_\_\_\_ 4. Damaged tissue surrounding the vessel
  - \_\_\_\_\_ a. triggers blood vessel \_\_\_\_\_ (constriction, dilation) and
  - \_\_\_\_\_ b. releases tissue thromboplastin, which begins the \_\_\_\_\_ pathway.
- \_\_\_\_\_ 5. The blood clotting factors that are processed in the intrinsic and extrinsic pathways were originally present in the blood in \_\_\_\_\_ (active, inactive) form.
- \_\_\_\_\_ 6. Does the cascading of activated factors in the intrinsic pathway serve to amplify the effects of the initial steps?
- \_\_\_\_\_ 7. The intrinsic and extrinsic pathways lead to activation of factor \_\_\_\_\_, which begins the \_\_\_\_\_ pathway.
- \_\_\_\_\_ 8. The common pathway leads to the formation of insoluble \_\_\_\_\_.
- \_\_\_\_\_ 9. What effect does fibrin have on the platelet plug?
- \_\_\_\_\_ 10. Are the precursors within the common pathway (factor X, prothrombin, and fibrinogen) in soluble or insoluble form in blood plasma?
- \_\_\_\_\_ 11. Does the cascading of the common pathway serve to amplify these reactions?
- \_\_\_\_\_ 12. After clot stabilization, actomyosin in platelets contracts. What effect does this have on the size of the clot and the wound?
- \_\_\_\_\_ 13. Clot dissolution is triggered by \_\_\_\_\_, which forms from \_\_\_\_\_.
- \_\_\_\_\_ 14. The chemicals that trigger plasmin formation form during the \_\_\_\_\_ and \_\_\_\_\_ pathways.
- \_\_\_\_\_ 15. Substances present in the blood normally inhibit clotting when blood vessels are not damaged.
  - \_\_\_\_\_ a. Prostacyclin, which is secreted by endothelial cells, is an antagonist of thromboxane A<sub>2</sub>. What effect does prostacyclin have on clotting?
  - \_\_\_\_\_ b. Heparin, which is found on the surface of endothelial cells, inactivates thrombin. What effect does heparin have on clotting?