

<b>Topic/Objectives:</b> 11-4 Hemostasis and Blood Groups; (1) Describe hemostasis; (2) Explain the basis of ABO and Rh incompatibilities	<b>Name:</b>
	<b>Date:</b>
	<b>Period:</b>

**Essential Question:** How does the blood provide body defense?

<b>Questions:</b>	<b>Notes:</b> <p>_____ refers to the stoppage of bleeding.</p> <ul style="list-style-type: none"> <li>◦ (1) _____: cutting a blood vessel causes the muscle in its walls to contract in a reflex, or engage in vasospasm.</li> <li>◦ (2) _____: platelets stick to the exposed edges of damaged blood vessels, forming a net with spiny processes protruding from their membranes.</li> <li>◦ (3) _____: a series of chemical reactions to form a blockage. <ul style="list-style-type: none"> <li>◦ Thromboplastin from damaged tissue →</li> <li>◦ Prothrombin activator produced →</li> <li>◦ Prothrombin converted into thrombin →</li> <li>◦ Fibrinogen converted into fibrin</li> </ul> </li> <li>◦ _____ then invade the area and produce fibers throughout the clot.</li> </ul>
	<p>Failed _____ led scientists determined that blood was of different types and only certain combinations were compatible.</p> <p>_____, the clumping of RBCs, is due to the interaction of proteins on the surfaces of RBCs (_____) with certain _____ carried in the plasma.</p> <p>Only a few of the antigens on red blood cells produce transfusion reactions, including the _____ group and _____ group.</p>
	<p><b>ABO Blood Group</b></p> <ul style="list-style-type: none"> <li>◦ Type _____ blood has A antigens on red blood cells and anti-B antibodies in the plasma.</li> <li>◦ Type _____ blood has B antigens on red blood cells and anti-A antibodies in the plasma.</li> <li>◦ Type _____ blood has both A and B antigens, but no antibodies in the plasma.</li> <li>◦ Type _____ blood has neither antigen, but both types of antibodies in the plasma.</li> <li>◦ Adverse transfusion reactions are avoided by preventing the mixing of blood that contains matching antigens and antibodies.</li> </ul>

