

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

Essential Question: How does the blood provide body defense?

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

