Chapter 20

ENRICHMENT

Use with Section 2

• Blood

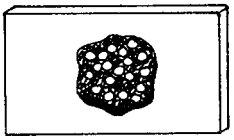
Blood Typing

Blood may be typed as A, B, AB, or O. To find the blood type, a drop of blood is mixed with special liquids called serums. Depending on the blood type, clumps will form in the drop of blood or it will be unchanged. For example, when a drop of type A blood is mixed with anti-A serum, clumps form. Clumps form because antibodies in the serum attach to antigens on the red blood cells. Antibodies are substances that provide immunity. Antigens are substances that signal the immune system to react. The antigens and antibodies stick together in clumps. When type A blood is mixed with anti-B serum, no clumps form and the drop of blood appears unchanged.

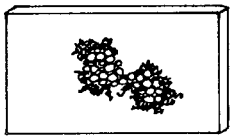
In the same way, type B blood clumps when mixed with anti-B serum but does not clump when mixed with anti-A serum. Type AB blood clumps with both anti-A and anti-B serum. Type O blood doesn't clump when mixed with any serum.

Look at the microscope slides below. Samples of blood have been mixed with anti-A and anti-B serums. Find out the type of each blood sample and complete the chart.

Sample 1



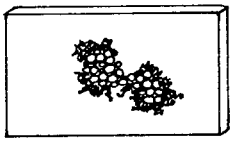
anti-A serum



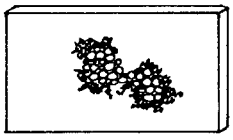
anti-B serum

Type _____

Sample 2



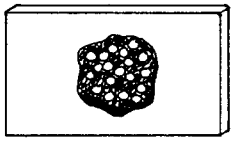
anti-A serum



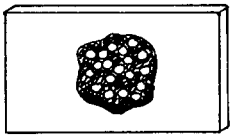
anti-B serum

Type _____

Sample 3



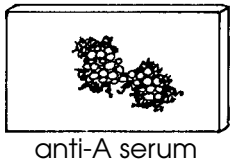
anti-A serum



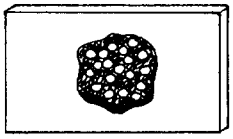
anti-B serum

Type _____

Sample 4



anti-A serum



anti-B serum

Type _____